

Business Operations Manual

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Version 4.0

Preface

The purpose of the National Oceanic and Atmospheric Administration's (NOAA) Business Operations Manual (BOM) is to provide a single organizational and management reference document to employees. The success of the NOAA mission depends upon a high level of performance by its personnel. This performance can be impaired if NOAA employees are not familiar with the organization's function, management structure and business procedures. Thus, the BOM provides NOAA employees with an overview of the NOAA Functional Model, organizational structure, management practices, Planning, Programming, Budgeting, and Execution System (PPBES), Support Services and Management of Resources.

NOAA employees, especially those who play a role in the PPBES, are encouraged to use the BOM as a reference. The BOM is written to provide new NOAA employees an overview of the tools needed to ensure the delivery of the highest quality of NOAA products and services. Information on where to locate additional detail is included in specific sections for those needing more guidance

The BOM is updated annually -- or more often if necessary –and consolidates a large amount of information from NOAA websites, briefings and other sources into a single reference manual.

TABLE OF CONTENTS

TABLE OF CONTENTS3	
CHAPTER 1 INTRODUCTION	1
1.1 Overview1	
1.2 Objectives1	
1.3 Organization	
1.4 Updates5	
CHAPTER 2 NOAA'S ENDURING FUNCTIONS	7
2.1 Explanations of the Functional Model Categories9	
2.1.1 Explanations and Examples of Each Function10	
2.2 NOAA within its Organizational Context15	
2.3 The Difference of a "Functional" Model16	
CHAPTER 3 NOAA'S ORGANIZATION	19
CHAPTER 3 NOAA'S ORGANIZATION	19
	19
3.1 NOAA's Organizational Structure19	19
3.1 NOAA's Organizational Structure	19
3.1 NOAA's Organizational Structure	19
3.1 NOAA's Organizational Structure	19
3.1 NOAA's Organizational Structure 19 3.2 Corporate Functions 20 3.3 Line Offices 22 3.4 Councils 23 3.5 Goal Teams and Sub-Goal Teams 24	19
3.1 NOAA's Organizational Structure 19 3.2 Corporate Functions 20 3.3 Line Offices 22 3.4 Councils 23 3.5 Goal Teams and Sub-Goal Teams 24 3.5.1 Goal Teams and Sub-Goal Teams Leads 26	19
3.1 NOAA's Organizational Structure 19 3.2 Corporate Functions 20 3.3 Line Offices 22 3.4 Councils 23 3.5 Goal Teams and Sub-Goal Teams 24 3.5.1 Goal Teams and Sub-Goal Teams Leads 26 3.6 Programs 26	19

3.7.3 Roles and Responsibilities29	
3.7.4 Communications	
3.7.5 Additional Information31	
3.8 Federal Advisory Committees31	
3.9 Executive Decision Process (EDP)32	
3.9.1 NOAA Executive Council	
3.9.2 NOAA Executive Panel	
3.9.3 Executive Decision Process Roles and Responsibilities34	
3.10 NOAA's Organization - Conclusion34	
CHAPTER 4 BUSINESS OPERATIONS3	5
4.1 Planning, Programming, Budgeting, and Execution System35	
4.1.1 NOAA's Strategic Planning Framework37	
4.1.1.1 Government Performance and Results Act	
4.1.1.2 NOAA's Key Documents	
4.1.1.3 Derivative Strategic Plans	
4.1.2 Requirements Management41	
4.1.3 Performance Management	
4.1.4 Planning	
4.1.4.1 Annual Guidance Memorandum45	
4.1.4.2 Program Operating Plans46	
4.1.4.3 Strategic Portfolio Analysis	
4.1.4.4 Planning Roles and Responsibilities	
4.1.4.5 Planning Phase Conclusion48	

4.1.5 Programming	. 50
4.1.5.1 Program Review Process5	52
4.1.5.2 Program Development Process5	52
4.1.5.3 Program Review and Development Roles and Responsibilities 5	3
4.1.5.4 Programming Phase Conclusion5	55
4.1.6 Budgeting	. 56
4.1.6.1 Budget Formulation Goals and Responsibilities5	57
4.1.6.2 Budget Calendar5	58
4.1.6.3 PPBES Budget Linkages5	i 9
4.1.6.4 Budget Formulation Roles and Responsibilities 6	51
4.1.6.5 Budgeting Phase Conclusion 6	64
4.1.7 Execution	. 65
4.1.7.1 Execution Roles and Responsibilities6	57
4.1.7.2 Execution of Annual Budget6	68
4.1.7.3 Appropriations 6	69
4.1.7.4 Allocation6	39
4.1.7.5 Resource Management 6	39
4.1.7.6 Fiscal Year Operating Plan7	' 0
4.1.7.7 In-Progress Review7	'1
4.1.7.8 Performance and Accountability Report7	'1
4.1.7.9 Reprogramming7	' 1
4.1.7.10 Reapportionment	' 2

4.1.7.11 Execution Phase Conclusion7	'3
4.1.8 Year-End Close-Out	.74
4.1.8.1 Closing Out a Fund at Year-End7	'4
4.1.8.2 Carryover Funds7	'5
4.1.8.3 Audit7	'5
4.1.8.4 NOAA Annual Business Report7	'6
4.1.8.5 Audit Roles and Responsibilities7	'6
4.1.8.6 Year End Close Out Conclusion7	7
4.1.9 Corporate Performance Measures	. 79
4.1.9.1 Budgeting Phase Performance Reports7	'9
4.2 Support Services	. 81
4.2.1 National Environmental Policy Act	. 81
4.2.1.1 NEPA Assessments	1
4.2.1.2 NEPA Roles and Responsibilities: 8	3
4.2.1.3 Additional Resources 8	3
4.2.2 Program Management	. 84
4.2.2.1 Establishing a New NOAA Program 8	5
4.2.2.2 Matrix Programs8	6
4.2.2.3 Program Managers	7
4.2.2.3.1 Appointing NOAA Program Managers8	8
4.2.2.3.2 Performance Elements for NOAA Program Managers9	0
4.2.3 Project Management	. 91
4.2.3.1 Major Projects9)1
	4.1.8. Year-End Close-Out 7 4.1.8.1 Closing Out a Fund at Year-End 7 4.1.8.2 Carryover Funds 7 4.1.8.3 Audit 7 4.1.8.4 NOAA Annual Business Report 7 4.1.8.5 Audit Roles and Responsibilities 7 4.1.8.6 Year End Close Out Conclusion 7 4.1.9 Corporate Performance Measures 7 4.1.9.1 Budgeting Phase Performance Reports 7 4.2 Support Services 7 4.2.1 National Environmental Policy Act 8 4.2.1.1 NEPA Assessments 8 4.2.1.2 NEPA Roles and Responsibilities: 8 4.2.1.3 Additional Resources 8 4.2.2.1 Establishing a New NOAA Program 8 4.2.2.2 Matrix Programs 8 4.2.2.3 Program Managers 8 4.2.2.3.1 Appointing NOAA Program Managers 8 4.2.2.3.2 Performance Elements for NOAA Program Managers 9 4.2.2.3 Project Management 9

4.2.3.2 OMB 300's9	2
4.2.3.3 Monitoring Major Projects9	4
4.2.3.4 Appointing NOAA Major Project Managers9	4
4.2.3.4.1 Major Project Manager Training Requirements9	5
4.2.4 Communications Office	.96
4.2.5 Research in NOAA	.97
4.2.5.1 Strategic Planning for Research in NOAA9	7
4.2.5.2 Research Council Structure9	7
4.2.5.3 Cooperative Institutes9	8
4.2.5.4 NOAA Definition of Research and Development9	9
4.2.5.5 Research Offices and Programs in NOAA10	0
4.2.5.6 Principles of Research and Development in NOAA10	0
4.2.5.7 Additional Information10	0
4.2.5.8. Transition of Research to Application10	0
4.2.5.8.1 Transition Roles and Responsibilities10	2
4.2.5.8.2 Transition Lessons Learned10	3
4.2.6 Education1	105
4.2.6.1 Basic Products and Services10	5
4.2.6.2 Organizational Structure10	6
4.2.6.3 Education Roles and Responsibilities10	6
4.2.6.4 Additional Information10	7
4 2.7 International Affairs	108

4.2.7.1 NOAA's International Engagement108
4.2.7.2 NOAA International Affairs Council109
4.2.7.3 Organizational Structure109
4.2.7.4 Roles and Responsibilities110
4.2.7.5 Additional Information110
4.3 Management of Resources111
4.3.1 Enterprise Architecture and Information Technology Management111
4.3.1.1 How Does the Enterprise Architecture Work? 113
4.3.1.2 IT Roles and Responsibilities113
4.3.1.3 Next Steps for NOAA's Enterprise Architecture
4.3.1.4 Guiding Principles114
4.3.1.5 Additional References118
4.3.2 Facilities Management119
4.3.2.1 NOAA Facilities Program Business Model119
4.3.2.2 Facilities Modernization Plan121
4.3.2.3 General Roles and Responsibilities122
4.3.2.3.1 PPBES Roles and Responsibilities
4.3.2.4 Additional Resources124
4.3.3 Satellite Management125
4.3.3.1 POES125
4.3.3.2 NPOESS126
4.3.3.3 GOES126

4.3.3.4 Satellite Services
4.3.3.5 Commercial Space Services
4.3.3.6 Satellite Strategic Plan
4.3.4 NOAA's Acquisition Management128
4.3.4.1 Organizational Structure
4.3.4.2 Roles and Responsibilities
4.3.4.3 Additional Information
4.3.5 Grants Management131
4.3.5.1 Assistance Instruments
4.3.5.2 Kinds of Grants and Cooperative Agreements
CHAPTER 5 MANAGEMENT SYSTEMS133
CHAPTER 5 MANAGEMENT SYSTEMS
5.1 Commerce Business System133
5.1 Commerce Business System 133 5.2 E2E 133
5.1 Commerce Business System 133 5.2 E2E 133 5.3 CasaNOSA 133
5.1 Commerce Business System 133 5.2 E2E 133 5.3 CasaNOSA 133 5.4 Program Information Reporting System 134
5.1 Commerce Business System 133 5.2 E2E 133 5.3 CasaNOSA 133 5.4 Program Information Reporting System 134 5.5 NOAA Data Warehouse 134
5.1 Commerce Business System 133 5.2 E2E 133 5.3 CasaNOSA 133 5.4 Program Information Reporting System 134 5.5 NOAA Data Warehouse 134 5.6 Management Analysis Reporting System 134

Appendices

Appendix A <u>Acronyms</u>	87
Appendix B <u>Glossary</u>	89
Appendix C NOAA Business Model – Historical Reference	100
Appendix D <u>Templates</u>	101
Appendix E <u>Change Summary</u>	105
Appendix F References and Resources	106



"Citizen-centered, results-oriented and market-based principles must drive how sound science is applied to meet the nation's tough challenges under sea, along our coasts and in the atmosphere."

Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce for Oceans and Atmosphere and
Administrator, National Oceanic and Atmospheric Administration

Chapter 1 Introduction

The National Oceanic and Atmospheric Administration's (NOAA) Business Operations Manual (BOM) is designed to promote the quality and uniformity of operations. The BOM is a living document designed to provide a comprehensive overview of NOAA's functions, organizational structure, and business operations. It provides standardized, up-to-date information and guidance for greater clarity and transparency of business processes, enhanced internal and external communications to support client and stakeholder needs, and fact-based decision-making. The BOM is intended to be updated at least annually to maintain currency with everimproving organizational changes and business processes.

1.1 OVERVIEW

With an annual budget of over \$4 billion, NOAA depends on personnel performing at a high level to achieve its mission. NOAA relies on its Line Offices, Staff or Corporate Offices, Goal Teams, program managers, and Regional Teams to determine and articulate future funding needs,

manage and communicate the status of financial health of funded projects, and account for funding obligated and expended during the fiscal year.

The BOM provides a common language and framework for understanding NOAA's business processes in the context of functions and organizational structure. It provides an overview of management policies, and provides links to NOAA websites where one can find guidance, current samples and templates for many NOAA documents and reports (Appendix F References and Resources). The BOM is especially helpful to new employees but can be used as a desk reference by all NOAA employees.

Although every attempt is made to keep the BOM synchronized with NOAA's business practices, the business environment is fluid and dynamic, and policies and procedures can change rapidly. The search for information should not be limited to the BOM, but instead should extend to all appropriate resources. Appendix F also contains a list of helpful websites.

Developing a Common Understanding of NOAA Business Practices

- Business practices for aligning strategy, goals, programs, and resources
- Clear, understandable, documented guidelines for easy desk reference
- Reference for internal and external stakeholders
- Standardized processes to promote consistent, repeatable outcomes
- Integrated view of processes, organizations, and tools

1.2 OBJECTIVES

The objective of the NOAA BOM is to strengthen the understanding of NOAA's functions, organizational structure, decision-making process and business operations. This manual provides up-to-date guidelines for aligning business operations with the strategic vision, and presents an integrated view of the functional model, organization, and business processes shown

below in Figure 1.2-1. The BOM is not intended to provide detailed instruction on any one topic. Rather the BOM provides general information to improve overall understanding of how NOAA operates and a guide to the appropriate source for additional detail on a specific topic.



Figure 1.2-1 Integration of Function, Organization, and Business Operations provides greater clarity and cohesion

NOAA's Goals, found in the Strategic Plan at www.ppi.noaa.gov/, encapsulate the vision, mission, and values. The BOM provides a foundation for understanding how NOAA views the work to be done and the process by which NOAA transforms day-to-day actions and NOAA's overarching strategy into societal benefits.

NOAA's Functional Model provides a framework for understanding and translating <u>what</u> NOAA is and <u>what</u> NOAA does. This manual acquaints the reader with the philosophy of the Functional Model. Following from the questions of what NOAA is, and what NOAA does, is "who performs these actions?"

The "<u>who</u>" of NOAA is an organizational structure consisting of Line Offices (LOs), Corporate Functions or Staff Offices (SOs), Goal Teams, councils, programs, and Regional Teams. NOAA is aligned so programs and projects cut across traditional organizational "stovepipes" and can optimize internal coordination and resources and improve internal and external communication. To enhance the exchange of ideas and capitalize on corporate capabilities, NOAA uses a matrix management style for some of its programs. In a matrix program, understanding reporting lines — and readily identifying stakeholders and decision makers — is critical to maximizing resources and capital and to minimizing redundancy and cost through greater communication and collaboration.

The business of doing business is complex in any organization. This manual provides an overview of NOAA's business processes outlining <u>how</u> the functions are performed. From Business Operations - which includes the Planning, Programming, Budgeting and Execution System (PPBES) - to Support Services to Management of Resources, the information in this manual provides a foundation and context for understanding NOAA's business processes.

1.3 ORGANIZATION

The BOM is organized in a progression, from identification of NOAA's work, depicted in the Functional Model, to a description of who produces or provides added value to the work that NOAA does, to the processes and tools that people employ to produce direct or indirect societal

benefits. Table 1.3-1 lists the chapters of the BOM, and provides a brief description of the topics covered.

Chapter 2 NOAA's Enduring Functions

NOAA's Functional Model is a conceptual representation of what NOAA does. It provides an over arching view of NOAA's enduring functions as derived from statutory drivers. Chapter 2 describes and provides examples of the Functional Model categories – Manage, Produce, and Provide – and explains the value of the Functional Model over traditional business models.

Chapter 3 NOAA's Organization

NOAA's organizational structure is described in this chapter. The organization implements NOAA's functions and efficiently executes NOAA's mission to deliver a wide variety of information, products and services and to act as responsible stewards of the nation's resources.

Chapter 4 Business Operations

NOAA's Business Operations chapter includes a detailed PPBES section, Support Services and Management of Resources sections. Support Services are business operations that provide the critical policy, programmatic, and managerial foundation to support NOAA operations. Management of Resources activities enable NOAA to manage resources and operate effectively, such as Satellite and Facilities Management and Acquisition and Grants.

Chapter 5 Management Systems

To navigate the challenges of initiating and managing projects and programs, NOAA uses a variety tools and systems designed with NOAA's specific needs in mind.

Chapter 6 Conclusion

The integrated operation of all of the processes, organizations, and tools is discussed in the conclusion.

Chapter	Title	Chapter Objective
1	Introduction	Provide the purpose and an overview of the BOM
2	NOAA's Enduring Functions	Introduce and Describe the NOAA Functional Model
3	NOAA's Organization	Describe the structure and operation of the Agency and includes NOAA's Executive Decision Process
4	Business Operations	Describe NOAA's Planning, Programming, Budgeting, and Execution System, Support Services and Management of Resources
	Planning, Programming, Budgeting and Execution System (PPBES)	Describes NOAA's Strategic Framework (including NOAA's Strategic Plan and Derivative Plans), Requirements Management and Performance Management and the four phases of the PPBES
4.2	Support Services	Describes the policy, programmatic and managerial functions that support NOAA functions
4.3	Management of Resources	Describes the support activities that allow NOAA to manage resources and infrastructure and to operate effectively
5	Management Systems	Describe management tools including PART Manual, CBS, E2E, PIRS, CasaNOSA, Grants on Line, C Request and MARS.
6	Conclusion	Summary NOAA business processes as presented in the BOM

Table 1.3-1 BOM Chapter Overviews

The BOM also includes Appendices containing a glossary of terms, references, resources and points of contact, sample documents and templates, and a summary of changes.

1.4 UPDATES

This 4th version of the BOM is an important update from the 2007 issue. Key differences are:

- NOAA's Regional Teams section has been expanded and a new section has been added describing NOAA's Federal Advisory Committees (Chapter 3)
- Content has been expanded to include more NOAA business operations (Chapter 4) to include a description of the Office of Management and Budget (OMB) 300 requirements and the criteria for establishing a Major Project
- NOAA Enterprise Architecture section is expanded and can be found in Chapter 4

For a more detailed list of changes, please refer to Appendix E, Change Summary. As business practices continue to improve and evolve, NOAA's Program Planning and Integration (PPI) Office will incorporate a growing breadth and depth of organizational information into the BOM. To capture changes and provide the most current information available, the BOM will be updated annually or as needed.

PPI maintains configuration control of the BOM. Please provide feedback to susan.a.kennedy@noaa.gov on any material included, or not included, in the BOM for consideration in future updates.

Chapter 2 NOAA's Enduring Functions

NOAA's enduring functions are the things that the agency does and will continue to do, irrespective of Line Offices or Goal Teams. The NOAA Functional Model, depicted in Figure 2-1, is an account of NOAA's enduring functions and how they relate to each other (and to external functions) to create value for the nation. Each function is a link within a value chain; it adds value to inputs to create better outputs. The Model shows that, at a general level, NOAA manages its resources to produce its core content and to provide final products. Stakeholders then apply NOAA's products, as well as NOAA's directed resources.

The Model provides a conceptual account of what NOAA does, as derived from statutory mission drivers. It provides a perspective of the work of the agency that transcends disciplinary boundaries, organizational boundaries, people, places, and scale of activity. How NOAA performs these functions over time may change, but – barring a significant change in NOAA's mission – the functions themselves will not. As its name implies, the purpose of the Functional Model is to depict only the functions in which NOAA engages. Only after these functions are accounted for can NOAA begin to address where and how the functions should be done. The Model is thus a crucial first step toward informed, purposeful "one NOAA" integration.

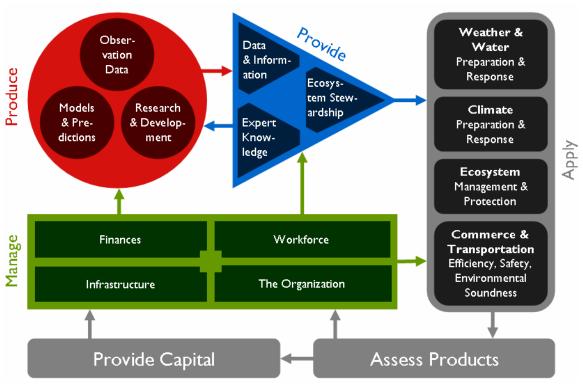


Figure 2-1 The NOAA Functional Model.

Shapes represent functions. Arrows represent the flow of value-added. Red, green and blue functions are internal to NOAA. Grey functions are external to NOAA.

NOAA's traditional organizational structure (Chapter 3) is divided by its lines of business, called Line Offices. Line Offices provide the agency's authoritative and budgetary hierarchy: who is in

charge of what, and who pays for what. Under the administration of Vice Admiral Lautenbacher, and in response to the findings of the Vice Admiral's Program Review Team and his implementation of Planning, Programming, Budgeting and Execution System (PPBES), NOAA began to understand its operations within a structure of discrete programs that satisfy strategic goals.

The NOAA Functional Model is another way of understanding the agency's operations, this time by agency functions as they reside within a value chain. The functions are defined in terms of their inputs and outputs. The Model is intended to be specific enough to capture any particular NOAA activity, but also general enough to encompass all that a given Line Office or Goal Teams does. The Model is particularly useful in the Planning phase to understand the consequences to the rest of the supply chain of adding, removing, or integrating capabilities.

The functional categories of the Model have been distilled from the set of legislative requirements drivers identified by NOAA's programs. They represent NOAA's enduring functions: the NOAA that *is* rather than the NOAA that could or should be. These categories were developed by a PPI-led working group including representatives from each NOAA Line Office and Goal Team. The Model has been accepted by the NOAA Executive Council (February 2007) as an accurate depiction of the work of the agency.

The Model has three desired outcomes. First, it is a necessary foundation for the broader goal to specify how NOAA produces and provides particular products. The genesis of the Model is in the FY 2008 Fiscal and Programming Guidance, which stated that Program Planning and Integration (PPI) "will develop a high-level model that describes NOAA's enduring functions, how those functions interrelate, and how they could be affected by changing external conditions." With a Functional Model, agency management at any level can identify best practices, apply lessons learned, find common ground for collaboration, and ultimately improve the efficacy and efficiency with which NOAA conducts its mission.

Second, for the next iteration of the NOAA Strategic Plan, the Model will account for the work of the organization, its inputs and outputs, in order to match evolving capabilities with evolving needs – irrespective of preexisting organizational structure. An effective strategic plan for an organization as complex as NOAA must be founded upon a thorough understanding of all of its functions, how they interrelate, how they add value, and how they perform in meeting their requirements.

Third, for improved communication throughout PPBES, the Model provides a common analytical framework and lexicon for both the NOAA workforce and policy-oriented stakeholders. It will improve the quality and consistency of information exchanged between programs, Goal Teams, PPI, Program Analysis and Evaluation (PA&E), and the Chief Financial Office (CFO), and it will illustrate how NOAA creates value for society, the environment, and the economy for Department of Commerce (DOC), Office of Management and Budget (OMB), and members of Congress. In so doing, it will empower each of these parties to communicate precisely what they need and expect from the others. For instance, it allows for an explicit conversation about whether an information service bottleneck could be overcome by improving functions to observe, model, or distribute final information products.

A common analytical framework and lexicon means that the Model can also provide a foundation for a NOAA-wide enterprise architecture. Enterprise architecture is a tool for managers of an enterprise such as NOAA to integrate all of the information necessary to sustain the operations of 8

the enterprise, from the requirements, capabilities, and performance measures of the agency as a whole to those of its most particular elements. The structure of enterprise architecture is all of the interrelationships between the information types, which will necessarily parallel the structure of the functions and sub-functions of the enterprise. For this reason, a model of NOAA's functions is a basis upon which to develop a NOAA-wide enterprise architecture.

2.1 EXPLANATIONS OF THE FUNCTIONAL MODEL CATEGORIES

The Model bins NOAA's functions into three internal functional categories (manage, produce, provide) and one category for external application (apply). The external application functions are the major "market niches" that NOAA orients itself toward. Within each category are a collection of functions that are defined by their outputs. This means that the Functional Model is effectively also a model of outputs. The arrows in the model represent the value added from each sort of output.

Produce functions represent NOAA's core capabilities, where NOAA has an unmistakable comparative advantage over other organizations. The agency observes the environment and gathers environmental data, it models the environment and makes environmental predictions and projections, and it conducts research and development for greater understanding of the environment in order to improve all of the other functions. The value-added of produce functions is to create intermediary goods out of the resources provided by the manage functions. These intermediary goods are, in turn, the building blocks of the final products of the provide functions. Produce functions yield the scientific or technical content of a final product, whereas provide functions yield its form and mode of delivery.

Provide functions are those functions where NOAA provides products for the direct consumption by partners or endusers. For example, issuing a weather forecast, warning, or advisory - as well as determining the exact form that these will take – are *provide* functions; they are all functionally distinct from the modeling and predicting that enable them. Similarly, NOAA's provision of expert knowledge and ecosystem stewardship are directly consumed by our partners and end-users. They are also supported by the intermediary goods that are the outputs of the *produce* functions and the resource allocations that are the outputs of the manage functions. The value-added of provide functions are the final, application-oriented products that NOAA customers need to conduct their everyday business.

Apply functions are those that NOAA's customers conduct, not those of NOAA itself. They are broken up by Mission Goal because this is the way NOAA understands external application areas from a strategic perspective. Those who perform apply functions are partners and end-users in government, industry, academia and the public at large. Coastal zone managers at the state level, for example, apply NOAA information and NOAA directed funds to conduct their operations. Private weather information vendors apply NOAA data, NOAA-developed models, and NOAA-trained expertise to conduct their business. Universities use NOAA grant money and NOAA data sets in their research. The value-added of apply functions is the ultimate social and economic benefit to society.

Manage functions are similar to capital management functions of any organization. All organizations manage capital as embodied in financial assets, physical infrastructure, workforce abilities, and the structure, norms, and business processed of the organization itself. The value-added of *manage* functions results from the appropriate distribution of different forms of capital to the other functions. *Manage* functions support each other, as well as the produce and provide functions. NOAA capital is also managed to support the external apply functions of our partners.

Following the application of NOAA products are the last two elements of the Model. Stakeholders assess the performance of NOAA's products in meeting their intended requirements. This assessment information comes back into NOAA through its *manage* functions. Assessment information also determines the amount of capital that is provided to NOAA in the next budgetary cycle. Thus, feedback into NOAA takes two forms: assessments of products and capital for future management.

Table 2.1-1 – Categories of NOAA Functions reflecting the composition of the Functional Model in Figure 2-1

2.1.1 EXPLANATIONS AND EXAMPLES OF EACH FUNCTION

This section provides a description of each NOAA function, followed by a few concrete examples intended to be illustrative rather than comprehensive. Many of the examples are derived from the OMB Business Reference Model, while others are more NOAA-specific. Explanations and examples of apply functions are not given here, but should be thought of as the NOAA-dependent activities of our partners and customers, grouped along the lines of NOAA's four strategic goals. Here the functions of each category are detailed in sequence: manage, produce, and then provide.

Manage Finances. This function is relatively straightforward. It includes the major activities of budgeting and accounting. Available funds are assessed, as are the costs and benefits of potential expenditures. Final spending is decided according to organizational priorities. Inflows and outflows of financial capital are categorized and tracked. Managing finances includes:

- Budget Formulation and Execution
- Capital Planning
- Federal Asset Sales
- Accounting
- Grants, Payments, and Loans
- Collections and Receivables
- Asset and Liability Management
- Reporting and Information

Manage Infrastructure. Similar to every other organization, NOAA manages the facilities that provide the workspace and tools for every other function. In NOAA's case, this includes facilities such as offices, laboratories, and weather stations; observation platforms such as ships, aircraft, satellites, and buoy networks; and IT systems from supercomputers to personal computers and office networks. Managing this infrastructure involves procurement, operation, maintenance, modernization, and replacement. Managing infrastructure includes:

- Construction
- Facilities, Fleet, and Equipment Management
- Security Management
- System Development
- Lifecycle/Change Management
- System Maintenance
- IT Infrastructure Maintenance

- · Record Retention
- Information Management
- Information Infrastructure Management

Manage the Workforce. Managing the workforce is about enabling the skilled workers of a highly scientific and technical organization such as NOAA. It includes managing people – employees, contractors, and NOAA Corps – but goes further to include optimizing people's access to and sharing of the data, information, and knowledge they need to be productive, and at the needed levels of quality. The activities involved are hiring, contracting, training, and intraagency communication. Managing the workforce includes:

- Workforce Planning
- Staff Acquisition
- Employee Development and Performance Management
- Organization and Position Management
- Compensation Management
- Benefits Management
- Employee and Labor Relations

Manage the Organization. Like every Federal agency, NOAA must manage itself as an organization to optimize performance. This includes managing NOAA's own internal processes, such as PPBES, Matrix Management, Regional Collaboration, enterprise architecture, supply chain management, performance evaluation, and general administrative support. It also includes managing its own business relations with other organizations through legal and regulatory mechanisms, as well as communicating and collaborating with stakeholders. Managing the organization includes:

- Legal Prosecution, Litigation, and Defense
- Foreign Affairs
- Program Monitoring and Evaluation
- Legislation Tracking
- Legislation Testimony
- Proposal Development
- Congressional Liaison Operations
- Policy and Guidance Development
- Enterprise Architecture

- Strategic Planning
- Management Improvement
- Product Outreach and Public Relations
- Logistics Management
- Acquisitions
- Capital Planning and Investment Control (CPIC) Process
- Program and Project Management

Produce Environmental Observation Data. The foundation of all of NOAA's work is accurate, reliable observation data of the environment, which can be obtained in situ or remotely, with platforms on land, at sea, in the air, or in space. Producing environmental observations data includes acquiring and validating environmental observations data from external (non-NOAA) sources. It includes acquiring and directly observing the human components of the environment, such as the production and consumption data for natural resources and other social and economic data. It also includes the technology transfer and deployment capabilities necessary to transition highly developed observations equipment from the experimental phase (within either NOAA's in-house R&D or an external partner's R&D) to the operational phase. Providing environmental observations data includes:

- Operating Observations Platforms
- Recording Data with Instruments
- Telemetry with Platform
- Data Transmit / Receive
- Processing Observations Data for Use
- Controlling Data Quality
- Assimilating Observations Data
- Archiving Observations Data

Produce Environmental Research and Analytic Tools. In order for NOAA to continually advance its operational services, it must conduct applied research of the ocean and the atmosphere, as well as the development, demonstration, and deployment of new technologies. NOAA must also have the ability to transfer the results of more basic R&D from other institutions into the agency's own portfolio of capabilities. Providing environmental research and analytical tools includes:

- Documenting Entities, Properties, and Processes
- Posing Answerable Questions and Testable Hypotheses
- Articulating Relationships and Causal Mechanisms

- Engaging Knowledge Networks
- Defining Goals for Sensor, Model, or other Analytic System
- Identifying and Choosing Technological Capabilities
- Designing Systems to Tailor Technological Capabilities to Defined Goals
- Building, Testing, and Refining Prototype Systems

Produce Environmental Models and Predictions. Models codify our understanding of the world. NOAA develops, employs, and maintains models to describe dynamic meteorological, hydrological, climatological, and ecological processes. Modeling requires observations data and foundational modeling research as inputs in order to produce predictions and projections as outputs. Providing environmental models and predictions includes:

- Defining Modeling Problems and Constraints
- Codifying Necessary Parameters and Quantitative Relationships Between Them
- Assembling New and Existing Components into Complete Models
- Transitioning Research Models or Employing Useful Components Where Possible
- Calibrating Model with a Test Data Set
- Running Model against Independent Existent Data and Validating Outputs
- Developing Efficient Data Acquisition Schemes
- Developing Operational Data Flow
- Simulating Future Environmental Conditions
- Making Predictions Based on Simulations
- Verifying Predictions on Different Temporal and Spatial Scales
- Augmenting Model Based on User Feedback
- Employing Successful Methods from Research Models
- Upgrading Hardware
- Coupling with Other Models

Provide Data and Information. This is likely the most well known of NOAA's functions, from the perspective of the external community. NOAA provides both the data and the assessments and analyses of those data vital to informing partners and customers about the current and future environmental conditions. Data and information include simple matters of fact about the environment as derived from observations and models, such as the number of salmon estimated within a given area, or the predicted surface temperature 24 hours ahead. Data and information always exist within a format (electronic or otherwise) that is separate from the content. Data and

information products always exist (and create value) as a combination of both form and content. Providing data and information includes:

- Website Design, Construction, Maintenance
- Public Archive and Database Maintenance
- Cartography and GIS Development
- Analytical Composition and Information Design
- Publishing, Editing of Public Documents
- Graphical User Interface Development
- Translations and Numeric Conversions
- Issuing Forecasts, Predictions, Projections
- Issuing Warnings and Advisories
- Issuing Assessments of Environmental Conditions
- Developing Information Format Standards
- Broadcast of NOAA Weather Radio All Hazards
- Developing Interoperable Communication Systems with Partners
- Customer Services and Help Desk Services

Provide Environmental Knowledge and Expertise. In addition to providing data and information, NOAA also provides a less tangible, but no less important product: knowledge of the environment, and of techniques for environmental monitoring, forecasting, and management. NOAA's "know-how" is distinct from its data and information. As with Data and Information, Knowledge and Expertise cannot exist independent of form. NOAA provides knowledge to the public via outputs such as professional journal articles, conference presentations, technical reference manuals, official testimonies, participation in inter-agency and international decision processes, websites and blogs, as well as media consultations. Providing knowledge and expertise includes:

- Presenting Scientific and Technical Findings
- Publishing Peer Reviewed Articles
- Publishing Technical Manuals
- Attending Conferences and Workshops
- Training on NOAA Products
- Educational Services

- Consulting on Scientific and Technical Issues
- Decision Support on How to Apply NOAA Products to Particular External Applications
- Technical Advice on Methodologies for Observations, Analysis, Modeling, Forecasting, and Coastal and Marine Resource Management
- International Advice and Leadership
- Advice and Leadership to Federal, International, State, Local, and Tribal Governments
- Congressional and Courtroom Testimony
- Media Services

Provide Stewardship of Coastal and Marine Ecosystems. In addition to supplying the data, information, knowledge, and expertise to partners so they can manage the ecosystems within their domain, NOAA itself has responsibilities to manage national trust resources. These activities range from regulation to protection to recovery. Providing stewardship of coastal and marine resources includes:

- Protection of Geographic Areas
- Protection of Sanctuaries
- Protection of Critical Habitats
- Protection of Research Reserves (Wetlands)
- Protection of Threatened or Endangered Species
- · Regulation of Fisheries
- Conducting Stock Assessments
- Issuing Permits
- Enforcement of Laws
- Recovery of Habitat
- Hazmat Response

2.2 NOAA WITHIN ITS ORGANIZATIONAL CONTEXT

An understanding of NOAA by its functions must be consistent with the understanding of NOAA as an organization in relation to other organizations. The figure below is a context diagram. It depicts NOAA as a "black box," defined only in terms of its inputs and outputs, from and to NOAA's partners as shown below.

Inputs take the form of different kinds of capital: financial, infrastructural, intellectual (people and ideas), and organizational. NOAA's management of these inputs is handled, not surprisingly, via

its four manage functions. Likewise, the outputs in the figure correspond to those of NOAA's three provided functions, namely: data and information, knowledge and expertise, and ecosystem stewardship.

NOAA exists in the context of its congressional budget line with agencies such as National Aeronautics and Space Administration (NASA) and National Institute of Standards and Technology (NIST), and it receives financial inputs from the public via Congress, OMB, and the Department of Commerce. NOAA provides and receives other outputs and inputs from sister agencies in various departments in the Federal government, as well as academia, the private sector, and domestic and international authorities. These other sectors have their own secondary relationships with the public, such as when NOAA data is used to provide a private weather forecast or when NOAA grant money assists in the education of the next generation of meteorologists.

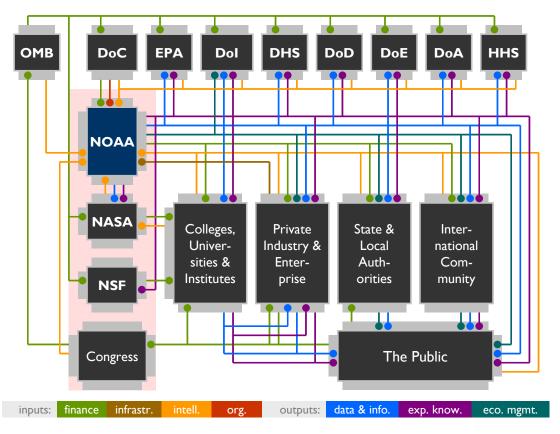


Figure 2.1.2-1 - NOAA Context Diagram

2.3 The Difference of a "Functional" Model

The Functional Model is different from other models of NOAA. The most important difference is that it is a model of functions, not a model of the people, places, or things that deploy those functions or are affected by them. Indeed, a single program, single office, or even a single person could deploy many of these functions in a single day.

Thus, it does not display NOAA's budget- and authority-based organization, which follows a traditional line and staff office model (and which has culminated from the separate evolution of distinct, historical bureaus). This traditional model answers the question, "Who has control over what?" Neither does the Model display NOAA's vision- and mission-based organization, which follows a goal and program model. This model answers the question, "Why do we do what we do?" In contrast to both of these existing models, the Functional Model answers the more basic question, "What kinds of things do we do?"

The Functional Model shares the objectives of the NOAA "Business" Model (see Appendix C). Both seek to connect the agency's resources to its activities, to its outputs, and ultimately to its stakeholders. The "Business" Model embodies a comprehensive list of elements that relate to NOAA strategy and roughly sketches out which elements are related to which other elements. But neither the elements nor the relationships are defined precisely, making the "Business" Model semantically cumbersome. The Functional Model is more focused, more analytically rigorous, and better suited as a tool for understanding how NOAA operates as a system. It answers the question "what does NOAA do?" by referring to the set of requirement drivers approved by NOAA General Counsel. It defines agency functions, categorizes those functions, and codifies the discrete value-added relationships between the functions.

The advantage of the Model is that it allows us to capitalize on the incorporation of "oneNOAA." Because the Model functions are idealized concepts of real-world activities, they enable us to see what is similar among the things NOAA does – complementing the natural habit of focusing upon what is different. Attention to the unique characteristics and roles of all the elements of our agency is an important managerial perspective to hold, particularly in defense of programs threatened with elimination. But the perspective of commonality affords us maximum flexibility for the future. The Model captures all existing activities, but could include more, different, or possibly fewer of them. It does not prescribe how these activities, extant or potential, are performed or who performs them.

Whatever is deemed appropriate for the development of NOAA, any changes would have to be justified within the agency and then beyond: in the Department, at OMB, and in Congress. The higher up in the managerial or budgetary hierarchy one goes, the less people of authority are familiar with the details of real-world activities and the more they can comprehend idealized forms. The public and their elected representatives are primarily concerned with "what kinds of things we do," secondarily with "why we do what we do," and finally with "who has control over what." The same is true, it might be added, for any specialist within NOAA who requires an understanding of the other areas in NOAA and how his or her activities relate to them.

The Functional Model is one of many possible taxonomies of NOAA's activities. It is important to note that any system of classifying idealized forms must be truthful to be useful; it must classify down to the level where one reaches real-world instances of those forms. So must it be with the Functional Model. It can be a powerful tool for facilitating communication and action, but care must be taken to make it as honest a representation of NOAA functions as possible. The Model must be continually developed to match NOAA's understanding of what it does.

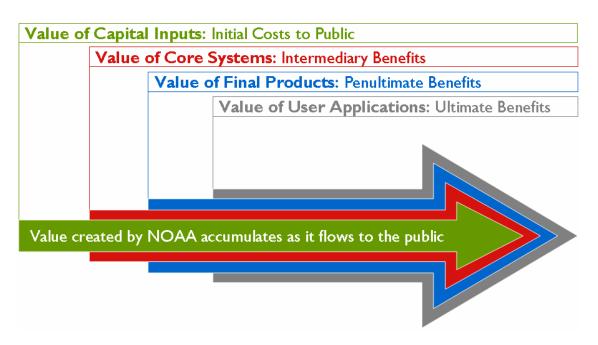


Figure 2.3-1 – Functions Adding Value. Each function adds value to the outputs of previous functions in the value chain.

Chapter 3 NOAA's Organization

NOAA's organization consists of Headquarters, Line Offices (LOs), Corporate Functions also known as Staff Offices (SOs), Goal Teams, councils, program managers and Regional Teams. To best apply corporate capabilities and expertise across Goals and Line Offices for complex programs, NOAA uses a matrix program management approach. NOAA is one of the 14 bureaus of the Department of Commerce. www.commerce.gov

3.1 NOAA'S ORGANIZATIONAL STRUCTURE

NOAA's organizational structure was developed to ensure the efficient delivery of NOAA products and services and to achieve the outcomes set forth in the strategic plan. At the organizational level, NOAA is led by a Headquarters that supports the delivery of services to the public from six LOs. The entire organization is supported by numerous service and management organizations. A more detailed view of the NOAA organization is depicted in NOAA's Organizational Chart, figure 3.1-1.

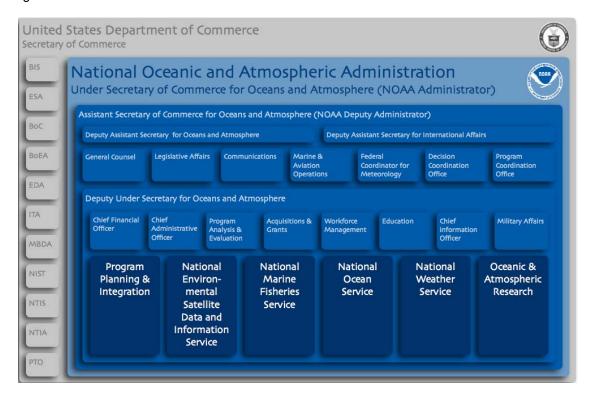


Figure 3.1-1 NOAA's Organizational Structure

(NOAA's Decision Coordination Office maintains an up-to-date organizational chart at www.noaa.gov)

3.2 Corporate Functions

NOAA's Corporate Functions, also commonly known as Staff Offices (SOs), develop the strategic direction for the agency and lead the management of resources and delivery of services. The major elements of the corporate structure include the offices of the Administrator, the Deputy and Assistant Administrators, and offices charged with corporate management functions, such as the Chief Financial Officer and the Chief Administrative Officer.

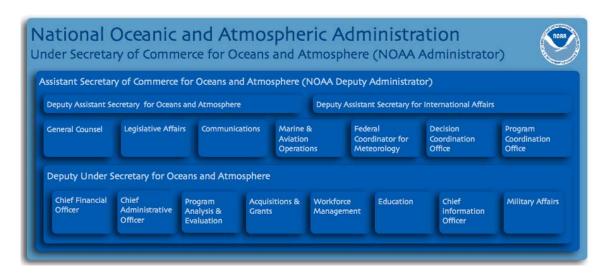


Figure 3.2 -1 Corporate Functions provide guidance for daily operations and set NOAA's strategic direction

Chief Financial Officer (CFO) is the principal financial manager for NOAA. NOAA has appropriated resources of over \$4 billion, with a recorded capital asset value that exceeds \$5 billion. The CFO's Office has the responsibility under the CFO Act of 1990 to provide the leadership necessary for NOAA to obtain a yearly unqualified opinion in the audit of its consolidated financial statements. The areas under the direction of the CFO are the Budget and Finance Offices. www.corporateservices.noaa.gov/public/cfopublic.html

Office of the Chief Information Officer and High Performance Computing and Communications (OCIO/HPCC) is responsible to ensure NOAA's programs make full and appropriate use of information technology. The NOAA OCIO oversees the expenditure of approximately \$600 million each year in information technology (IT) spending alone - computer hardware, software, services, networking, and telecommunications. The OCIO is focused on IT security, critical infrastructure protection and Homeland Security, in order to ensure the integrity and continuity of operations of NOAA systems, data, products, and services. The NOAA OCIO manages and integrates NOAA's HPCC infrastructure, including advanced networking and applications, and serves as the project management office for NOAA's R&D High Performance Computing Systems. It seeks to modernize NOAA's computationally intensive services through the use of evolving HPCC technologies. Short-term weather warnings, seasonal forecasts, and regional and global climate predictions are heavily dependent on major advances in high-end computing power, advanced information technology, and the widespread availability of environmental data and information. www.cio.noaa.gov/

Office of the Chief Administrative Officer (CAO) provides comprehensive, NOAA-wide technical, programmatic guidance and staff support to the Office of the Under Secretary in the areas of Facilities Management, including real estate (lease management, real property acquisitions), and construction project planning, design and engineering; Logistics Management, including personal property, transportation, supply chain and building management; Freedom of Information Act, competitive sourcing guidance, OIG/GAO liaison; Safety and Environmental Compliance programs; Civil Rights and Equal Employment Opportunity programs; NOAA Deemed Export program; Business Process Re-engineering Transition Management Team initiatives; and Directives and Records Management www.corporateservices.noaa.gov

Office of International Affairs (OIA) supports and promotes national policies and interests in ecosystem-based management, climate change, Earth observation, and weather forecasting. OAI endeavors to maximize the mutual benefits of international exchange with its global partners. www.international.noaa.gov

Office of Program Analysis and Evaluation (PA&E) conducts independent and objective analysis. The Office provides evaluations and assessments of plans, programs, and requirements. PA&E reviews all significant program initiatives and major requirements, and provides analytical support to all parts of NOAA. PA&E is responsible for the Programming phase of PPBES. www.ppbs.noaa.gov

Acquisition and Grants Office (AGO) reviews solicitations for grant applications, processes applications, negotiates awards, manages administrative and financial aspects of awards, monitors progress against expenditures, resolves audit problems, and closes out awards as projects are completed. www.ago.noaa.gov

Workforce Management Office (WFMO) provides policies, programs, and processes that facilitate the recruitment, hiring, development, and retention of a diverse, highly skilled, motivated, and effective workforce capable of accomplishing the Agency's mission. The WFMO provides NOAA-wide leadership to workforce management functions including strategic human capital planning, labor-management and employee relations, performance management and incentive awards, executive resources, distance learning, leadership development, training and career development, and human resources data management and automation initiatives. www.wfm.noaa.gov

Office of Education (OEd) provides advice and counsel to the Under Secretary on matters pertaining to education. In conjunction with the NOAA Education Council, OEd coordinates education activities across NOAA and oversees the implementation of the NOAA's Education Plan and Policy. These efforts help ensure that NOAA's education programs and activities are based on NOAA science and support the agency's cross-cutting priority of promoting environmental literacy. www.oesd.noaa.gov

Office of General Counsel (OGC) serves as NOAA's chief legal officer. OGC provides legal services and guidance for all matters that may arise in the conduct of NOAA's mission. www.gc.noaa.gov

Office of Legislative Affairs (OLA) coordinates all NOAA contacts with Congress (except those relating to appropriations) and is responsible for the planning, direction, and coordination of legislative programs that are of immediate concern to the Under Secretary. OLA also maintains a summary of all of the NOAA programs or activities based in, or focused on, states or territories

at www.legislative.noaa.gov/NIYS0107/noaainyourstate.html and a brief overview of major NOAA facilities around the country for each of our Line Offices with a color map and short summaries of what each facility does at www.legislative.noaa.gov/policybriefs.html. The general web site is www.legislative.noaa.gov

Office of Communications (OC) coordinates all NOAA interviews with NOAA leadership and coordinates External Affairs including questions on policy issues, budget and legislation, constituent affairs, stakeholder relationships, intergovernmental affairs, business/industry liaison, and exhibits. www.noaa.gov/media

Office of the Federal Coordinator for Meteorology (OFCM) ensures the effective use of Federal meteorological resources by coordinating weather requirements and services and supporting research among the Federal agencies.www.ofcm.gov/

Office of Marine and Aviation Operations (OMAO) operates a wide variety of specialized aircraft and ships to complete NOAA's environmental and scientific missions. OMAO is also responsible for the administration and implementation of the NOAA Diving Program to ensure a level of diving skill conducive to safe and efficient operations in NOAA-sponsored underwater activities. www.omao.noaa.gov

Decision Coordination Office (DCO) serves as the Executive Secretary to the NOAA Executive Council and Panel (NEC and NEP). DCO is responsible for establishing meeting agendas, procedures, and attendance; distributing scheduling information; preparing, distributing, and maintaining NEC/NEP proceedings (minutes and decision memoranda); maintaining and archiving a list of outstanding action items; and tracking completion of actions. Anyone assigned an action in a NEC or NEP meeting is responsible for providing progress updates to DCO. www.dco.noaa.gov

Program Coordination Office (PCO) provides staff support to NOAA Leadership and represents NOAA leadership in their liaison with NOAA Assistant Administrators and their staffs. www.pco.noaa.gov

Additional information is available at www.noaa.gov/organizations.

3.3 LINE OFFICES

LOs represent the operating branches of NOAA and are responsible for managing the delivery of products and services that meet the needs of NOAA customers and stakeholders.



Figure 3.3 -1 Line offices develop and deliver NOAA's products and services

Office of Oceanic and Atmospheric Research (OAR) provides the research foundation for understanding the complex systems that support our planet. Working in partnership with NOAA's other organizational units, OAR makes better forecasts, earlier warnings for natural disasters, and a greater understanding of the Earth possible. OAR's role is to provide unbiased science to better manage the environment, nationally and globally. www.oarhq.noaa.gov

National Ocean Service (NOS) keeps ocean and coastal areas safe, healthy, and productive. The NOS serves America by conserving marine and coastal places for present and future generations, ensuring safe and efficient maritime transportation, and promoting innovative science and technology solutions to coastal challenges. www.nos.noaa.gov

National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters, and ocean areas for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure for use by other government agencies, the private sector, the public, and the global community. www.weather.gov

National Marine Fisheries Service (NMFS) is responsible for the management, conservation, and protection of living marine resources within the United States' Exclusive Economic Zone. NMFS assesses and predicts the status of fish stocks, ensures compliance with fisheries regulations, works to reduce wasteful fishing practices, and recovers protected marine species without unnecessarily impeding economic and recreational opportunities. www.nmfs.noaa.gov

National Environmental Satellite, Data, and Information Service (NESDIS) provides timely access to global environmental data from satellites and other sources to promote, protect, and enhance the Nation's economy, security, environment, and quality of life. To fulfill its responsibilities, NESDIS acquirtes and manages the Nation's operational environmental satellites, provides data and information services and conducts related research. www.nesdis.noaa.gov

Office of Program Planning and Integration (PPI) provides corporate management to coordinate NOAA's many lines of service with the Nation's many needs for environmental information and stewardship. It ensures that investments and actions are guided by a strategic plan; are based on sound social and economic analysis; adhere to executive and legislative science, technology, and environmental policy; and integrate the full breadth of NOAA's resources, knowledge, and talent to achieve its mission. www.ppi.noaa.gov

3.4 Councils

NOAA's Councils and Boards provide leadership and coordination across the agency for high interest/high visibility functional and strategic areas. The councils serve as a forum for developing policy and procedures, reviewing internal and external policy and technical/scientific issues, guiding Goal Team and program resources, and condensing complex issues into understandable terms and recommendations for the NEC and/or NEP. Terms of Reference and contacts for all NOAA Councils are available on the DCO website at www.dco.noaa.gov. NOAA's Boards serve to review and approve capital investment proposals as part of the budget formulation and major project review process.

NOAA Councils are the entry point for the Executive Decision Process (see more on the Executive Decision Process in Section 3.9 of this chapter).

NOAA Councils

Strategic:

Ocean (NOC)

Research

Observing Systems (NOSC)

Corporate Acquisition Management:

Program Management (PMC)

Facilities Investment Management Board (FIMB)

NOAA Information Technology Review Board (NITRB)

Operational:

Education

Fleet

Human Capital (HCC)

International Affairs

Chief Information Officer (CIO)

Chief Financial Officer/Chief Administrative Officer (CFO)

Strategic Councils provide analysis and recommendations related to the NOAA functions that require multi-LO strategic leadership and guidance related to NOAA's strategic role and policy position in areas that are underspecified, changing rapidly, or under question by external stakeholders. These councils are not decision-making bodies – they are advisory - and convene to serve the strategic decision making needs of NOAA.

Corporate Acquisition Management Councils provide NOAA-wide acquisition management oversight. These councils track NOAA's major acquisitions to ensure that projects are executing properly in terms of technical, budget and schedule performance.

Operational Councils coordinate and manage staff or other corporate office operations that extend across Line Offices. They operate under the authority of a corporate office director (accountability resides at the corporate office level), are standing coordination bodies and do not require NOAA leadership approval to execute primary responsibilities and decisions. The oversight role entails arbitrating stalemates on council decisions, tasking councils to support specific decisional needs, and reviewing and approving council actions that have significant financial or operational implications for NOAA as a whole.

3.5 GOAL TEAMS AND SUB-GOAL TEAMS

Goal Teams and Sub-Goal Teams are responsible for turning high-level goals and objectives set forth in the NOAA Strategic Plan into a set of specific and understandable actions toward providing societal benefits.

NOAA Mission: To understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs NOAA Vision: An informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions Ecosystem Goal: Protect, Restore, and Manage the Н Use of Coastal and Ocean Resources Through an Ecosystem Approach to Management Climate Goal: Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond Weather & Water Goal: Serve Society's Needs for Weather and Water Information Commerce & Transportation Goal: Support the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation Mission Support Goal: Provide Critical Support for NOAA's Mission Satellite Sub-Goal Fleet Services Sub-Goal Modeling & Observing Infrastructure Sub-Goal Leadership & Corporate Services Sub-Goal

Figure 3.5-1 Goal Teams translate strategic outcomes into executable tasks

3.5.1 GOAL TEAMS AND SUB-GOAL TEAMS LEADS

Goal Leads provide leadership and coordination across the organization to ensure programs and activities are consistent with the mission and vision outlined in the NOAA Strategic Plan.

Goal and Sub-Goal Leads Responsibilities:

- Provide leadership and coordination across the goal
- Serve as the principal coordinating body to ensure a consistent NOAA message to external partners and stakeholders
- Assist with the update of the NOAA Strategic Plan and the development of the Annual Guidance Memorandum
- Lead the development of Program Plans coordinating with program managers, Line and Staff Offices and councils.
- Assist with Line and Staff Office budget preparation
- · Represent the goal in budget reviews
- Recommend any needed changes in the distribution of resources based on decisions through the PPBES cycle
- Work with the PPI, PA&E, and Chief Financial Officers/Budget Chiefs throughout the PPBES to develop sound fiscal budget requests and executable programs/projects.

More information can be found at www.ppbs.noaa.gov/PDFs/Roles_& _Responsibilities.pdf.

3.6 PROGRAMS

A NOAA program is a focused set of activities and/or project(s) managed in a coordinated way to obtain benefits not available from managing them individually and is designed to achieve a specific outcome(s) of the NOAA Strategic Plan goals. Program activities/projects may cross Line Office (LO) or corporate boundaries. Matrix program managers lead programs that are supported by resources across multiple LOs. Guidance on the creation of new NOAA programs or modifying existing programs and the responsibilities of program managers can be found in section 4.2.2. More

NOAA's programs are

- Authorized through the Executive Decision Process
- Described in a charter,
- Managed by a Program Manager (PM),
- Sponsored by Line or Staff Office, and
- Assigned to a specific Goal or Sub-Goal.

information on the current status of goals and programs is available at www.ppi.noaa.gov.

3.7 REGIONAL COLLABORATION NETWORKS

The vision of NOAA's regional collaboration effort is to facilitate multi-disciplinary planning and execution on the highest priority regional needs, mobilizing knowledge and capabilities across the agency, and engaging stakeholders in order to

- Address NOAA mission priorities at appropriate geographic scales
- Address distinct regional challenges related to NOAA's mission
- Leverage current and emerging regional partnerships to respond to stakeholder needs
- Enhance NOAA's value to and impact on the region

To attain this vision, NOAA has established goals to support integrated, regionally-tailored implementation of NOAA-wide programmatic priorities and to provide a more systematic approach to both internal and external communications. Success in the Regional Collaboration effort will be measured by NOAA's ability to advance the work of the agency.

Goals of Regional Collaboration -

- Improved services for the benefit of NOAA's customers (e.g., citizens, researchers, resource managers);
- Increased value and productivity of partnerships (e.g., other Federal agencies, academic institutions, state and local governments);
- Improved stakeholder relations and support (e.g., Congress, non-profits, industry):
- Improved internal communications and efficiency across NOAA's existing organizational structure; and
- A more visible and valued NOAA.

3 7 1 GIUDING PRINCIPLES

The Guiding Principles for Regional Collaboration were established to offer a foundation of understanding as the effort moves forward. While these principles are fundamental to the way NOAA's Regional Collaboration effort operates, they remain open to amendment as the effort matures and develops.

- NOAA shall advance its goals for Regional Collaboration through existing authority and accountability structures. This effort does not entail changes to NOAA's organizational structure.
- NOAA's products and services shall be science-based and stakeholder-driven. The
 overarching purpose of Regional Collaboration is to improve NOAA's productivity and value
 to customers.
- NOAA Regional Collaboration participants shall strive to identify, acknowledge, and apply NOAA's full range of capabilities, within and across regions, as needed to improve NOAA's productivity and value to customers.

Regional Collaboration Operational Framework

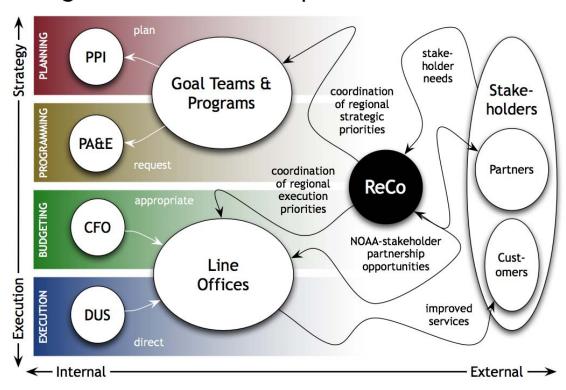


Figure 3.7.1-1 Regional Collaboration (ReCo) as it is designed to relate to existing authority and accountability structures. The input and output arrows represent interactions that are affected by and relevant to the ReCo effort.

3.7.2 GEOGRAPHIC FRAMEWORK

A NOAA-wide geographic framework was designed to provide a basis for regional-scale stakeholder and partner engagement, and provide an organizing principle to encourage cross-NOAA integration. During development of the regional framework, several criteria were noted: public perception of regional identity, alignment with existing NOAA capabilities and with regional partners, ecosystem-related boundaries, Federal and state jurisdictions, size-manageability of regions, and the geographic dimensions of programmatic priority areas. The geographic framework is revisited annually to ensure it remains responsive to furthering the goals of NOAA's Regional Collaboration effort.

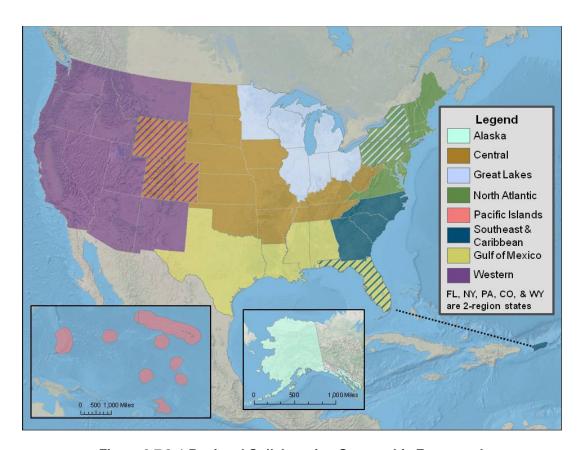


Figure 3.7.2-1 Regional Collaboration Geographic Framework

3.7.3 ROLES AND RESPONSIBILITIES

In accordance with the above Guiding Principles, NOAA's Regional Collaboration effort operates through existing authority, accountability, and organizational structures. NOAA is advancing this effort through collaborative teams that link NOAA's Goal Teams and Line Offices on a regional and national basis. Some coordinating bodies have been established, however, to advance the effort. The lead teams responsible for the implementation of Regional Collaboration include the:

- Executive Oversight Group (EOG), consisting of Deputy Assistant Administrator-level leadership, which seeks input, establishes the goals and the direction of the effort, and serves as the principal advocate for the Regional Collaboration effort within NOAA. The EOG monitors and tracks adherence to the goals and principles, evaluation and support of the Regional Collaboration Teams, and the success of the effort as a whole.
- Office of Program Planning and Integration (PPI), which serves as the organizational focal point for the Regional Collaboration effort. PPI's Assistant Administrator serves as the Chair of the Executive Oversight Group, and PPI staff support the integration of Regional Collaboration efforts into the agency's business practices.
- ❖ Regional Collaboration Teams, which are inter-Line Office collaborative groups that facilitate interactions between regional stakeholders and corporate NOAA to improve NOAA services and visibility in the region. Regional Collaboration Teams work within the execution structure of NOAA to improve the Line Offices' ability to meet the agency's mission, and are lead by senior integrators of NOAA's activities in the regions. Regional

Collaboration Teams are responsible for knowing the stakeholder needs in their regions and communicating that information to the Line Offices and Goal Teams. In addition, the teams promote internal NOAA communication on regional issues with one another as well as with the PATTs, the EOG, and the Line Offices. The teams are not directly responsible for meeting the specific stakeholder needs that are articulated; execution of projects that meet the expressed needs and requirements of stakeholders and customers is fundamentally the responsibility of the Line Offices.

Priority Area Task Teams (PATTs) work with the Regional Teams, the Goal Teams, and other partners, as appropriate, to develop a NOAA-wide strategy for addressing specific programmatic priorities. PATTs are mechanisms for accomplishing corporate priorities that: 1) have strong stakeholder demand at the regional level; 2) are inherently regional in terms of execution requirements; and 3) require capabilities from multiple NOAA offices or partners. The PATT approach includes interactions that foster support for executing these priority areas at the regional level to meet expressed stakeholder needs. The EOG can form or disband the PATTs as needed to align national and regional execution priorities. The current Priority Area Task Teams are: Hazard Resilient Coastal Communities, Integrated Ecosystem Assessments, Integrated Water Resource Services, and Outreach and Communications.

3.7.4 COMMUNICATIONS

The teams that comprise the NOAA Regional Collaboration effort work together at the regional and the national level to ensure that stakeholder needs are being heard across the agency, and collaborative opportunities with partners are being maximized. The transmission of this information is accomplished through: informal networking among Line Office, Goal Team, and PATT representatives on and among the Regional Collaboration Teams; formal written documents such as input to the Annual Guidance Memorandum; and standing meetings among the teams. These interactions support the planning and execution functioning in NOAA by facilitating regionally-coordinated, near-term and future projects that meet stakeholder needs in the region.

The EOG, each PATT, and each Regional Collaboration Team formally communicate through standing meetings. These meetings occur both separately and as periodic joint meetings. Regional Collaboration Team Leads and the Team Coordinators also meet with each other, PPI, and/or Outreach and Communication PATT representatives to ensure full communication among Regional Collaboration Teams, and between the Regional Collaboration Teams and the EOG.

In addition, the EOG members are encouraged to meet regularly with their Line Office representatives on the Regional Collaboration Teams. These meetings serve to inform the membership of current activities as well as to work on strategic planning, annual plans, and cross-regional team integration. These Line Office representatives should also serve as a link to and from their respective Line Offices on a continuing basis. Similarly, Regional Collaboration Team members on the PATTs provide regionally relevant information to and from each PATT. Correspondingly, Goal Team representatives on each PATT, as appropriate, serve as the communication link between these two entities.

3.7.5 ADDITIONAL INFORMATION

Additional information about NOAA's Regional Collaboration effort is available by contacting the Program Planning and Integration Office or on-line at http://www.ppi.noaa.gov/PPI_Capabilities/regional_collaboration

3.8 FEDERAL ADVISORY COMMITTEES

The Federal Advisory Committee Act (FACA) requires that certain procedures be followed whenever a Federal agency seeks the consensus advice of a group external to the Federal government. The purpose of FACA is to provide uniform standards for the operation of advisory committees used in the executive branch and to ensure public access to and knowledge of their deliberations. The following is a description of NOAA's existing Federal Advisory Committees (FACs).

The Advisory Committee on Commercial Remote Sensing (ACCRES) advises NOAA on "matters relating to the US commercial remote-sensing industry and NOAA's activities to carry out the responsibilities ... set forth in the Land Remote Sensing Policy Act of 1992" and in particular the provisions of this act having to do with licensing of private remote sensing space systems. ACCRES has 13 members (charter requires 12-15) selected to carry out these functions. To learn more go to http://www.accres.noaa.gov.

The Marine Protected Areas Federal Advisory Committee MPAFAC was established by Executive Order 13158, "Marine Protected Areas" which establishes policy for protecting "the significant natural and cultural resources within the marine environment for the benefit of present and future generations by strengthening and expanding the Nation's system of marine protected areas (MPAs)". The MPAFAC has 25 members and more information can be found at http://www.mpa.gov/mpafac

The Marine Fisheries Advisory Committee (MAFAC) was established by the Secretary of Commerce (Secretary) on February 17, 1971, to advise the Secretary on all living marine resource matters that are the responsibility of the Department of Commerce. This committee advises and reviews the adequacy of living marine resource policies and programs to meet the needs of commercial and recreational fisheries, and environmental, State, consumer, academic, tribal, governmental and other national interests. The complete charter and summaries of former meetings are located online at www.nmfs.noaa.gov/ocs/mafac

The Hydrographic Services Review Panel (HSRP) was established by the NOAA Hydrographic Services Improvement Act. The HSRP is directed to provide advice to the NOAA Administrator on all authorities related to hydrographic surveys. For example, the scope of HSRP includes hydrographic surveying, nautical charting, water level measurements, and geodetic measurements; the scope also includes operations, research, development, and dissemination of these data. To learn more about the HSRP refer to http://chartmaker.ncd.noaa.gov/ocs/hsrp/hsrp.htm

The Sea Grant Review Panel SGRP was established in 1976 and is authorized by statute (33 U.S.C. 1128) to advise the Secretary of Commerce, the Under Secretary for Oceans and Atmosphere (NOAA), and the Sea Grant Director (NOAA) on the direction, operations, and performance of the National Sea Grant College Program. The Panel is comprised of 15 individuals with expertise in marine science and with diverse backgrounds related to ocean, coastal, and Great Lakes resources. Learn more about the SGRP at http://www.seagrant.noaa.gov

The NOAA Science Advisory Board (SAB) is an external 15-member Federal Advisory Committee composed of eminent scientists, engineers, resource managers, and educators who advise NOAA on long- and short-range strategies for research, education, and the application of science to resource management and environmental assessment and prediction. The advisory board assists NOAA in maintaining a current understanding of scientific issues critical to the agency's mission. Members are appointed by the NOAA Administrator to serve a three-year term, with the possibility of renewing once. More on the SAB can be found at www.sab.noaa.gov

In addition to NOAA's six FACs discussed above, NOAA has established a number of FACs to carry out its responsibilities under the Climate Change Science Program (CCSP). In particular, CCSP has identified a schedule for the production of 21 CCSP Synthesis and Assessment Products (see http://www.climatescience.gov/Library/sap/letter-to-demint2005.htm). NOAA has the agency lead for seven of these products and has established individual FACs for each CCSP report, where FACA applies. These FACs are highly focused on a given CCSP product, and each will be terminated when the CCSP product is completed. To learn more about the CCSP FACs go to http://www.climate.noaa.gov

3.9 Executive Decision Process (EDP)

All parts of the organization discussed in this chapter play important roles in NOAA's decision-making processes. The integration of LOs, SOs, Goal Teams, programs and councils in the Executive Decision Process (figure 3.8-1) provides the breadth of knowledge, expertise, and responsibility required to make sound decisions.



Figure 3.9-1 NOAA's Executive Decision Process

3.9.1 NOAA EXECUTIVE COUNCIL

The NOAA Executive Council (NEC) provides information and advice to the Under Secretary of Commerce for Oceans and Atmosphere (U/S) for decisions on key NOAA issues (e.g. policy, resources requirement approval, future directions) and to provide a clear and unambiguous record of U/S decisions and directions.

NEC Members

- Under Secretary (Chair)
- Chief of Staff to the Under Secretary
- Assistant Secretary for Oceans and Atmosphere
- Deputy Assistant Secretary for Oceans and Atmosphere
- Deputy Assistant Secretary for International Affairs
- NOAA General Counsel
- Deputy Under Secretary
- All Assistant Administrators
- Director, Office of Marine and Aviation Operations

Advisors

Director of Office of Communications; Director of Office of Legislative Affairs; Chief Information Officer; Director of Program Analysis and Evaluation; Chief Administrative Officer; Chief Financial Officer; Director of Workforce Management Office; Director of Acquisition and Grants Office; Director of Office of Education; Executive Director to the Deputy Under Secretary and Deputy Chief of Staff

Executive Secretary – Decision Coordination Office

3.9.2 NOAA EXECUTIVE PANEL

The NOAA Executive Panel (NEP) provides information and advice to the Deputy Under Secretary for issues related to NOAA's day-to-day operations and management, and coordinates and oversees the planning, programming and budgeting process. The NEP serves as the final forum ensuring issues, programs and briefings are condensed into understandable terms and recommendations for decisions before presentation to the NEC..

NEP Members

- Deputy Under Secretary (Chair)
- · All Deputy Assistant Administrators
- Deputy Director, Office of Marine and Aviation Operations
- · Chief Information Officer
- · Chief Financial Officer
- · Chief Administrative Officer
- Director, Workforce Management Office
- Director, Program Analysis & Evaluation Office
- · Director, Acquisition and Grants Office

Advisors

Executive Director to the DUS

Deputy Directors of Education, General Counsel, International Affairs, Legislative Affairs, Communications and Military Affairs

Executive Secretary – Decision Coordination Office

3.9.3 Executive Decision Process Roles and Responsibilities

The **Under Secretary and NOAA Administrator** is the agency's senior decision maker for NOAA-wide policy.

NEC provides information and counsel to the Under Secretary concerning decisions on key agency issues and policies, and to provide a clear and unambiguous record of the agency's decisions and directions.

NEP is a senior-level body, composed primarily of deputy-level officers, that provides information and advice to the Deputy Under Secretary in making decisions on NOAA-wide operation issues and policies. Through the NEP, NOAA senior management provides input into the day-to-day NOAA-wide management issues that do not require the attention of the NEC. It also serves as the final forum ensuring that issues, programs, and briefings are condensed into understandable terms and recommendations for decisions before presentation to the NEC.

LO/SOs are the operating branches that perform one or more of the program functions assigned to NOAA.

Goal Teams focus on generating long-term outcomes and organizing their programs to deliver a broad array of benefits for society. Goal Team Leads may attend applicable portion of meetings.

Councils and Committees are the focal point for considering NOAA-wide issues (e.g., planning, resource requirements, and policy) in various functional areas. They serve as a forum for reviewing and as appropriate deciding issues, formulating decision briefings, and condensing complex issues and programs into understandable terms and recommendations for decisions before presentations to the NEC and NEP.

Policies, detailed presentation procedures, and the list of members/advisors of the NEP and NEC are updated as necessary and are available online at www.dco.noaa.gov

3.10 NOAA'S ORGANIZATION - CONCLUSION

NOAA is organized around three main components: Operating Branches, Corporate Functions, and Goals. Operating Branches are the Line Offices and Staff Offices that provide the resources to execute the programs. Corporate Functions are performed at the headquarters level, and include NOAA Administration corporate-level offices and support staff (such as the Chief Financial Officer and Chief Administrative Officer). Goals convert high-level goals and strategies into specific and actionable programs.

Program managers staff their programs through LO/SOs, which are supported by Corporate Functions and Regional Teams. They manage the assigned activities derived from the goals and strategies of the Goal Teams, and are responsible for staffing, managing, communicating and monitoring programs. If a program crosses multiple LOs, or is sufficiently complex, it may be designated a matrix program, which requires greater coordination across NOAA.

For more information on NOAA's organizational structure visit www.noaa.gov

Chapter 4 Business Operations

NOAA's business processes align resources with NOAA's Strategic Plan so that work can be performed to meet strategic goals. NOAA divides its business operations into three broad categories: Planning, Programming, Budgeting and Execution System (PPBES), Support Services and Management of Resources.

As with the Functional Model discussed in Chapter 2, this framework facilitates a functional approach. Resource decentralization for deployment across the organization requires standardization and cohesion of policies and procedures and greater oversight of critical resources.

The NOAA PPBES is an inclusive process that ties each of the major resource planning, allocation, and management processes together to ensure all activities effectively achieve NOAA's mission. NOAA's Support Services provide strategy, policy, managerial, and programmatic support and implementation.

NOAA's sustainable, repeatable business processes take the guesswork out of management.

- Standardized processes to promote consistent, repeatable outcomes
- Reference for internal and external stakeholders
- Integrated view of processes, organizations, reference materials
- Consistent formats and measurements for reporting the health of programs

Management of Resources functions provide NOAA-wide administrative and organizational activities necessary to develop and maintain facilities, workforce, and information technology infrastructure.

4.1 Planning, Programming, Budgeting, and Execution System

"PPBES" is NOAA's integrated, requirements-based Planning, Programming, Budgeting, and Execution System that is designed to:

- Use NOAA's strategic vision to drive annual investment and management priorities, programmatic and policy choices, and budget development; and
- Provide a systematic approach to allocating resources optimally and maximizing programmatic impact.

PPBES Annual Objectives

- Plan to achieve NOAA strategic priorities
- Prioritize resources
- Develop and select the best options for meeting Strategic Plan goals
- Focus budget expenditure and program results and accountability
- Manage project cost, schedule, and performance
- Adjust resource requirements relative to execution performance
- Evaluate overall effectiveness of the NOAA Program

Adapted from established PPBS practices in the Defense Department, PPBES was designed to address NOAA's corporate decision-making needs, based on recommendations of the 2002 NOAA Performance Review Team. It also was designed to comply with external demands for

improved strategic management and performance-based budgeting, as set forth in the President's Management Agenda and Government Performance and Results Act.

NOAA first implemented the PPBES in FY 2003 and, at the end of FY 2008, will have completed three full cycles covering all four phases of the system. PPBES is implemented through a NOAA Administration Order (NAO) 216-111.

In accordance with the Federal appropriations and reporting cycle, PPBES focuses on annual objectives for using all available NOAA resources to achieve the best return on investment in pursuit of fulfilling NOAA's strategic goals. PPBES allows for careful planning, prioritization of resources across competing requirements, fact-based assessments of best program options, objective evaluation of performance, and strict focus on accountability. And PPBES serves as a program, project, and milestone system to orient and influence all NOAA activity levels and requirements.

Three important elements of the PPBES are the Strategic Framework, Requirements Management (RM) and Performance Management. These are described in the next three sections. A description of key PPBES documents and a Master Calendar are provided in Section 4.1.1.2. Detailed descriptions of the individual PPBES phases follow in Sections 4.1.4 through 4.1.8.

	Planning	Programming	Budgeting	Execution
Purpose: What NOAA	Should do	Can do	Will do	Does
Steps	Strategic & Annual Planning	Program Review & Development	Formulation & Justification	Program Performance & Financial Management
Lead	Program Planning & Integration (PPI)	Program Analysis & Evaluation (PA&E)	NOAA Budget Office (NBO)	Deputy Under Secretary / NOAA Budget Office (DUS/NBO)

Figure 4.1-1 Key PPBES functions

4.1.1 NOAA'S STRATEGIC PLANNING FRAMEWORK

Planning is "strategic" to the extent that it relates to the identification of long-term or overall aims and interests and the means of achieving them (Oxford English Dictionary). NOAA's strategic planning process identifies strategic goals, outcomes, and objectives and develops supporting and implementing plans to reach them.

NOAA'S Strategic Goals

- Ecosystems
- Climate
- Weather and Water
- Commerce and Transportation
- Mission Support

The NOAA Strategic Plan begins by identifying the agency's strategic mission and vision. The mission statement defines NOAA's purpose and is a succinct summary of NOAA's business. The vision describes the impact NOAA aims to have on society when it successfully fulfills its mission; it describes a "future state" the agency strives to obtain.

The Strategic Plan also identifies NOAA's strategic goals, which are more particular future states that NOAA is aiming for to achieve its vision. NOAA's goals have been derived from stakeholder input and internal assessments of our mandates and mission.

Nested underneath each strategic goal are high-level outcomes that detail the intended purpose of all efforts related to that goal. Each outcome is further defined by lower level objectives that provide further detail on how to evaluate the achievement of that outcome. All NOAA work is planned and organized with respect to this hierarchical framework: from mission to vision, to goal, to outcome, to objective.

NOAA's Line and Staff Offices execute activities required to achieve these goals, outcomes and objectives through NOAA programs. These programs may involve the activities of more than one Line or Staff Office as they endeavor to realize the outcomes and objectives of their respective goals.

4.1.1.1 Government Performance and Results Act

The Government Performance and Results Act of 1993 (GPRA) instituted formal requirements for strategic planning and performance measurement in the Federal government. Under GPRA, which aims to improve government performance, the Department of Commerce (DOC) is required to address some basic questions:

- What is the Agency's mission?
- What are NOAA's goals and how will it achieve them?
- How can NOAA measure its performance?
- How will it use that information to make improvements?

GPRA further requires DOC to act on the answers to those questions by setting goals, measuring performance, and reporting on accomplishments. When defining the Agency's mission, GPRA stipulates consultation with Congress and other stakeholders. GPRA requires long-term strategic goals, as well as annual goals that are linked to them. (Annual updates to GPRA guidance are issued in the A-11 Circular from the Office of Management and Budget.) Performance must be measured against strategic goals and progress reported publicly. As a bureau of DOC, NOAA develops its own Strategic Plan incorporating GPRA requirements.

4.1.1.2 NOAA's Key Documents

The following table provides a summary of the key documents generated by NOAA throughout the PPBES in support of GPRA and OMB requirements. It shows the schedule and owner(s) for each product. Consult the NOAA PPBES site (www.ppbs.NOAA.gov) for the historical guidance and documents and the latest guidance to confirm specific requirements.

Products	Responsibility	Signature Authority	PPBES Phase	Schedule
NOAA Strategic Plan	Program Planning and Integration (PPI)	Administrator	Planning	Once every 3 years in support of DOC Strategic Plan
Annual Guidance Memorandum	PPI	Administrator	Planning	Annually
Strategic Portfolio Analysis	Goal Team Leads	Not Applicable	Planning	Annually
Program Plans	Goal Team Leads	Not Applicable	Programming	Annually
Program Decision Memorandum	Program Analysis and Evaluation (PA&E)	Administrator	Programming	Annually
Annual Budget	Chief Financial Officer (CFO)	Administrator	Budgeting	Annually
Annual Performance Plan (included with Annual Budget submission)	CFO	Administrator	Budgeting	Annually
Annual Performance and Accountability Report	CFO	Administrator	Execution	Annually
Derivative Strategic Plans	Line and Staff Offices; Councils; Goals; programs	Assistant Administrator; Office Director; Council Chair	Planning	Updated with organizational or management changes or in conjunction with NOAA Strategic Plan
Annual Operating Plans	Line and Staff Offices; Programs	Assistant Administrator; Office Director; Program Manager	Execution	Annually in conjunction with appropriations

NOAA's Strategic Plan is a relatively stable document that is updated on approximately a 3-year cycle. PPI builds the plan around NOAA's core functions and provides persuasive rationale for long-term strategic goals and outcomes. Developing a strategic plan is a 9-12 month iterative process of data gathering, analysis, revision, and vetting of NOAA's approach to defining mission needs and the strategies to meet these needs. The next NOAA Strategic Plan will be developed in conjunction with DOC and the next administration in 2009/10.

As part of the strategic planning framework, NOAA is required to submit to DOC an Annual Budget. This document includes the Annual Budget and the Annual Performance Plan for a given fiscal year. More information on the development of the Annual Budget is provided in section 4.1.6.

NOAA Line and Staff Offices and Councils may also develop supporting strategic plans to carry out the NOAA Strategic Plan. Guidelines for developing derivative strategic plans are provided in section 4.1.1.3.

Annual Operating Plans (AOPs) serve to report and evaluate progress to plan on strategic goals and other organizational priorities. AOPs are a contract with NOAA senior leadership, and provide data that is used to evaluate program performance. More on AOPs can be found in section 4.1.7.

At any given time during the year, PPBES activities for multiple years are taking place. For example, at the beginning of the fiscal year, the previous year's expenditures are reconciled and validated in a year-end closeout, while the current year's funding is being executed and future years' funding are in various stages of planning, programming, and budgeting. Figure 4.1.1.2-1 provides a snapshot of concurrent and sequential activities, and their corresponding time frames.

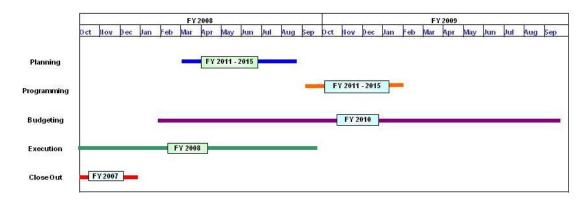


Figure 4.1.1.2-1 PPBES Master Calendar

4.1.1.3 Derivative Strategic Plans

In order to function cleanly and efficiently, NOAA has one strategic plan. The NOAA Strategic Plan sets the course, establishes the highest-level goals and outcomes for the American people against which to measure performance, and communicates these expectations internally to NOAA employees and

Derivative Plans

Where are we now and where do we need to be to achieve NOAA's Goals?

externally to NOAA partners and stakeholders. In the same way that NOAA has developed a strategic plan that is derived from the DOC Strategic Plan, NOAA's Line and Staff Offices (and programs) may develop Derivative Plans (2nd Tier Strategic Plans) to execute the strategic goals outlined in the NOAA Strategic Plan. These plans serve as the bridge between the customer-focused NOAA Strategic Goals (on the "demand side") and the production and delivery of products and services associated with achieving those goals (on the "supply side"). The LO/SO plans should identify organizational goals, outcomes, and objectives that are derivative of NOAA's corporate-level strategic goals, outcomes, and objectives. They should detail specific products and service types, the programs and projects necessary to realize them, and how their efforts contribute toward achieving NOAA's strategic goals. These LO/SO plans establish the objectives for employee performance plans. Figure 4.1.1.3-1 illustrates the hierarchy of strategic plans.

NOAA's Cross-Cutting Priorities*

- World Class Workforce
- Integrated Earth Observations Data
- State-of-the-Art Research
- Environmentally Literate Public
- Strong National and International Relationships
 *From NOAA Strategic Plan

Councils may also develop Supporting Plans to guide NOAA's cross-cutting priorities. These plans must also clearly articulate support to the accomplishment of NOAA strategic goals. These plans guide the work horizontally across the organization by establishing objectives and targets toward functionally-specific outcomes.

Derivative Plans also include infrastructure plans. These plans provide a framework by which future long-range planning decisions are made for managing NOAA's capital assets. These plans must demonstrate support for NOAA's mission although this may be indirect. The list of infrastructure plans in the text box is a sample of plans currently in use or in development.

Infrastructure Plans

- Facilities Master Plan
- Satellite Strategic Plan
- Fleet Recap Plan
- Aircraft Recap Plan
- Information Technology Strategic Plan

To be recognized as a strategic plan of NOAA, Derivative Strategic Plans that are intended to be distributed outside NOAA to partners or stakeholders must meet several criteria. They must explicitly and succinctly state:

- How one or more derivative goals, outcomes, and/or objectives that define the envisioned future state are derivatives of corporate-level strategic objectives and must be stated, that is, they must link to the lowest level of the corporate strategic hierarchy
- How the activities are to be undertaken
- How these activities meet the derivative goals, outcomes, and/or objectives stated at the outset
- What persons or organizational bodies will be conducting these activities
- What the outputs of these activities are and demonstrate how these outputs will realize the derivative goals, outcomes, and/or objectives stated at the outset

Plans intended to be externally distributed must be reviewed for consistency with the NOAA Strategic Plan by the Program Planning & Integration Office (PPI). PPI will also assist in developing Derivative Plans and should be consulted early in the development process.

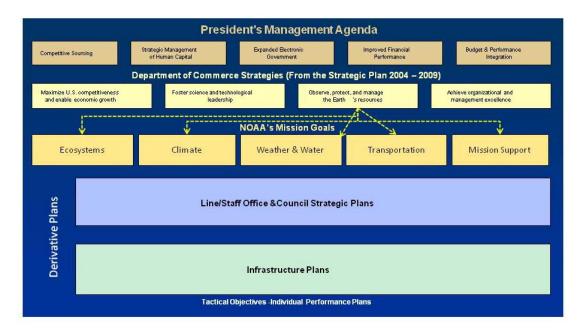


Figure 4.1.1.3-1 Hierarchy of Strategic and Derivative Plans

4.1.2 REQUIREMENTS MANAGEMENT

NOAA uses Requirements Management (RM) to meet the strategic goals and outcomes of the NOAA Program. RM is implemented through the NOAA Administration Order (NAO) 216-108, and the PPBES NAO 216-111.

RM is an important tool for NOAA managers as it helps them ensure programs are responsive to stakeholder and customer needs and expectations while working within the organizational constraints and priorities. RM ensures NOAA programs respond to valid needs to attain stated goals. RM includes the identification and validation of mission requirements from legislation, policy directives, and stakeholder/customer needs. These mission requirements are then formulated into program capabilities and projects where functional and operational requirements are specified, developed, analyzed, prioritized, and managed.

NOAA's RM policy supports both the Department of Commerce (DOC) and OMB policies for acquisition of major capital assets, see section 4.2.3. RM policy also provides guidance and flexibility to tailor oversight for NOAA's projects that are not major capital asset acquisitions. RM may result in solutions that affect policy and process changes, partnerships and grants, research and analysis, and research transition to applications. NOAA's RM policy and processes facilitate compliance with Federal guidance and good business practices throughout NOAA.

The goals of RM are to execute NOAA's responsibilities to:

- Satisfy the highest priority needs of NOAA's customers.
- Improve resource utilization.
- Assess internal and external environments to anticipate future opportunities and challenges continuously and systematically.
- Strengthen the implementation of enterprise-wide solutions.

Federal guidance mandates efficient and effective use of resources, tied to an agency's mission, goals, outcomes, and objectives. Additionally, the Federal Acquisition Streamlining Act of 1994, Title V, requires agencies to establish cost, schedule, and measurable performance goals for all major Federal acquisitions. The OMB Circular A-11 requires that new investments be justified on the basis of addressing gaps and that are works in progress must demonstrate satisfactory progress toward achieving cost, schedule, and performance goals. NOAA RM adopts these concepts for all programs and projects. See section 4.2.3 for further guidance on the management of NOAA's major projects.

NOAA's transition of research to application process implements the guidance given in the NOAA NAO 216-105. This process describes the general steps that all NOAA or NOAA-sponsored research must go through in order to transition into the NOAA operational enterprise. The Transition Implementation section provides procedures for transitioning research. The programmatic and budgetary framework for identifying and executing transitions is governed by NOAA's PPBES and the NOAA RM process, and is managed by the NOAA Transition Board. More on NOAA's Transition of Research to Application policy can be found in section 4.2.5.8.

4.1.3 PERFORMANCE MANAGEMENT

Performance management is the ongoing monitoring and reporting of program progress against pre-established goals using performance measures. It is one of many performance management tools used to evaluate the effectiveness and efficiency of a program. For program managers, defining relevant and meaningful performance measures can help clarify expectations and understanding about the full nature and extent of a program. Goal Teams and managers can use performance information derived from performance measures to identify problems in existing programs, try to identify the causes of problems, and/or develop corrective actions. The resulting information can be used to develop strategies, plan and budget, identify priorities, and make resource allocation decisions. At the NOAA Administrator and senior management level, performance measurement helps ensure the organization is moving toward strategic planning goals and outcomes, and organizational priorities.

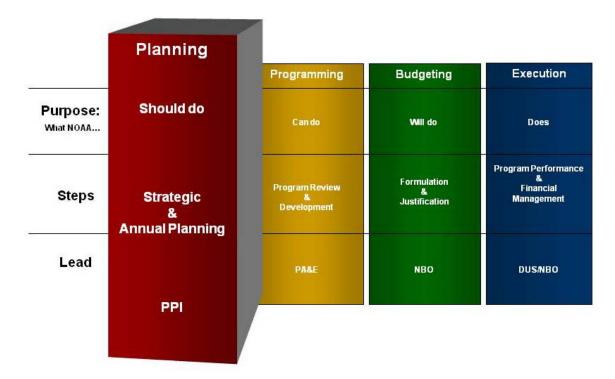
The highest-level performance measures, called Corporate Performance Measures (CPMs), focus on high-level program and Goal outcomes that further the NOAA mission and vision, and the strategic objectives that lead to these outcomes. CPMs exist at the highest program and Goal levels and serve to communicate NOAA's corporate performance to external audiences and provide a basis for internal evaluation of NOAA's progress to plan. More information on CPMs can be found on the PPBES website at www.ppbs.noaa.gov/performance.html and in section 4.1.9.

NOAA's Corporate Performance Measures Government Performance and Results Act (GPRA) President's Management Agenda (PMA) Program Assessment Rating Tool (PART) DOC Secretarial Priorities Information Technology Management Satellite Management

The Mission Goals and Sub-Goals (Goal Teams) are responsible for turning the high-level goals and strategies in the NOAA Strategic Plan into a set of specific and understandable actions. Goal Teams secure senior management's commitment to the actions, and identify relevant stakeholders and customers.

The programs and Sub-Goal programs are responsible for developing measures that link with the desired outcomes and performance indicators established by the Line Offices and Goal Teams. The Sub-Goal programs may establish their own goals and outcomes as they determine the required level of support to the Mission Goals and programs.

The LO and SO represent the employee and execution level of the performance management system. The LO and SO are responsible for developing and reporting the CPMs and supporting the Mission Goals, Sub-Goals, and programs with policy, guidance, and resources (financial, human capital, and infrastructure).



The first phase of PPBES, the Planning phase, is conducted by the Office of Program Planning and Integration (PPI). The Planning phase provides an opportunity to identify, discuss and efficiently plan for what should be done within the NOAA Program to achieve NOAA's strategic Goals, Outcomes, Objectives, and Annual Priorities before the imposition of budget constraints in the Programming phase. The Planning phase is highly collaborative, involving extensive input from and interaction among Line Offices and Staff Offices (LOs and SOs), Goal Teams, programs, councils, Regional Teams, partners

Key Activities Performed During the Planning Phase of PPBES

- Review and analysis of the NOAA Strategic Plan
- Annual Guidance Memorandum (AGM) development, approval, and distribution
- Program Charter reviews and updates
- Program analyses supported by Program Operating Plans (POPs)
- Goal Team analysis supported by Strategic Portfolio Analyses

and stakeholders. Planning helps to ensure corporate agreement is reached on the Goal-specific strategic priorities required to achieve NOAA's mission.

During the Planning phase, NOAA senior leadership reviews and adjusts its programmatic and organizational priorities in the context of changes to internal NOAA capabilities and external trends in partner and customer demand, social and economic conditions, scientific and technological developments, the Strategic Plan and the state of the environment.

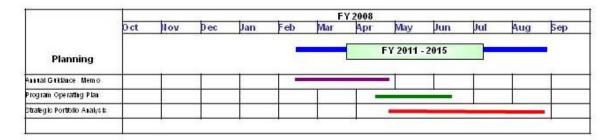


Figure 4.1.4-1 Overview of the PPBES Planning Phase Schedule

4.1.4.1 Annual Guidance Memorandum

The AGM is NOAA's principal annual planning guidance document. All other planning documents, see Figure 4.1.4.1-1, cascade from the AGM and support the annual priorities identified in it.

The AGM is issued at the beginning of the Planning phase and identifies a limited number of high-level, highimpact, high-visibility NOAAwide program priorities that require significant and sustained financial or managerial resources and efforts. To maximize the impacts of these investments, NOAA selects priorities based on societal benefits, the most compelling and urgent needs of customers, and solutions that build on NOAA's unique competencies.

Multiple Channels for Input to the AGM

- Stakeholder and constituent interactions via Line Offices, Goal Leads, and Councils
- Direct stakeholder solicitation
- Federal Register requests and announcements
- Review of major conferences and association meetings
- Advisory committees

The AGM also presents key trends and drivers affecting NOAA's strategic goals. To identify these trends, PPI examines the key events affecting the Planning priorities, such as increasing external demands on NOAA, leadership priorities for the Department of Commerce and NOAA, and the external fiscal environment. To ensure comprehensive stakeholder input, PPI solicits feedback through multiple forums and channels.

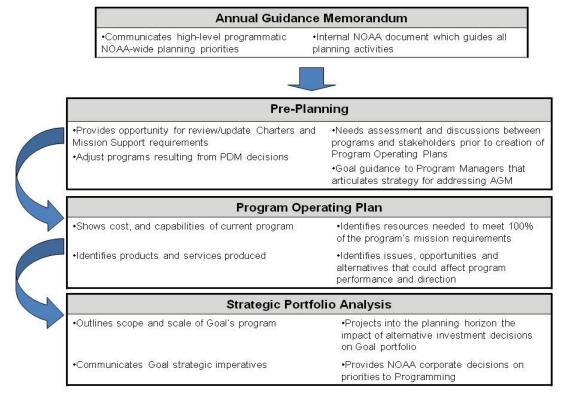


Figure 4.1.4.1-1 NOAA's planning documents originate from and support the AGM

4.1.4.2 Program Operating Plans

During the Planning phase, NOAA's programs develop and produce Program Operating Plans (POPs). A POP provides a single planning document that conveys essential program information such as scope and benefits, performance relative to cost and schedule, resource gaps, and future issues that could affect the program's relevance or performance. The POP allows Program managers to effectively and efficiently plan their programs and is the primary document used by Goal Leads when they construct Strategic Portfolio Analyses. Activities that support POP development include an annual Program Charter review and initial planning data collection.

Although Program Charters are stable documents.

POPs Convey Key Program Elements

- Description of current program
- Description of gap between current and 100% program capability and capacity
- Resources (funding and personnel) needed to meet 100% of the Program's mission requirements
- Products and services provided by those resources

an annual review is required to any Charter components that may be affected by recent changes in legislation, and/or NOAA leadership decisions that affect requirements drivers. Program managers review their Charters and forward changes to PPI, via the Goal Leads, before

developing their POP submission. Data collection and consolidation supporting POPs is achieved by input into the CasaNOSA system.

4.1.4.3 Strategic Portfolio Analysis

Using content from the POPs, Goal teams develop business cases for priority areas and a strategic portfolio analysis which critically evaluates, under varying fiscal scenarios, the composition of the programs that fall under the Goal's review. Priorities for FY2011-15 resulting from the AGM are shown in Figure 4.1.4.3-1. Subsequently, PPI, using content from the Goal's analysis, develops a corporate strategic portfolio analysis. To conclude the Planning cycle findings are presented to the NEP/NEC.

Goal analyses and corporate portfolio analyses reveal choices, which will help to:

- Introduce strategic decisions at a corporate level (based on corporate priorities identified through the AGM process).
- Focus on NOAA's roles, responsibilities, and capacities (based on evolving and continuing demands).
- Offer options for how to deal with the strategic decisions (based on a break down by function, not program).
- Make recommendations that are anchored in fiscal reality.

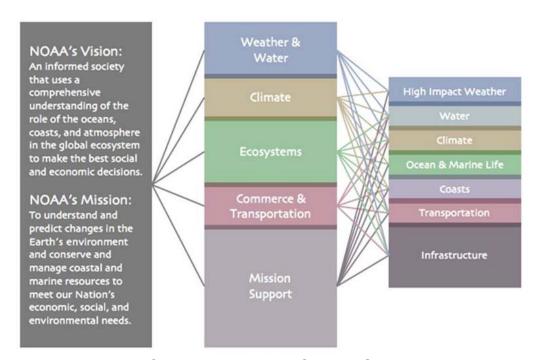


Figure 4.1.4.3-1 NOAA's Mission, Vision, Strategic Goals and FY 11-15 Priorities

4.1.4.4 Planning Roles and Responsibilities

The Office of Program Planning and Integration (PPI) conducts and oversees the Planning phase: the development of the NOAA Strategic Plan, AGM, Program Charters, POP, and Strategic Portfolio Analysis.

The NEP and the NEC review, comment on, and approve the AGM and the subsequent strategy development conducted by Goal Leads and PPI within the framework set by the AGM.

Councils work with PPI to develop the AGM. The Councils work with the Goal Leads and program managers on specific data requirements collected in the POPs via the CasaNOSA database (e.g., data collected for the Education and Research Councils). The Councils also may contribute to the development of the Strategic Portfolio Analyses, as relevant to the functional domains of individual Councils.

LOs/SOs review and comment on the Program Charters to ensure that applicable legislative drivers and NEP/NEC decisions have been incorporated. The LOs/SOs work with PPI to develop the AGM. The LOs/SOs participate as members of the NEP and NEC, as described. In addition, they are responsible for complying with applicable planning guidance and for providing expertise throughout the Planning process.

Goal Leads participate in the development of the AGM. The Goal Leads, in conjunction with the LOs/SOs, approve any updates to the Charters. Based on the AGM, Goal Leads may provide additional guidance to programs for development of POPs, as needed to assist Goal Leads in the development of their Strategic Portfolio Analysis, to be submitted to PPI near the end of the Planning phase.

Program managers review their charters and make necessary updates and receive approval for these updates by the Goal Leads, PPI and the appropriate LOs/SOs. Using CasaNOSA, the program manager updates the POP and prepares analyses of alternatives for key program gaps. The program managers review their performance measures as directed.

NOAA's Regional Team Leads provide input to PPI during development of the AGM. The Regional Team Leads also will work with the Goal Leads during development of the Strategic Portfolio Analyses, as needed to advance specific AGM priorities.

Program Analysis and Evaluation (PA&E) consults with program managers in the development of the POPs and Strategic Portfolio Analyses and provides current program information for loading into CasaNOSA.

NOAA Chief Financial Officer/Budget Office is responsible for providing updates to PIRS to reflect budget decisions.

4.1.4.5 Planning Phase Conclusion

The NOAA Planning phase provides the framework within which resource allocation decisions are made during the Programming and the Budgeting phases of NOAA's Planning, Programming, Budgeting, and Execution System (PPBES). The planning process encourages the organization to critically evaluate and analyze choices for accomplishing of NOAA's corporate priorities as

expressed in the AGM. This process empowers NOAA team members, at all levels of the organization, to engage in critical thinking and offer their analysis to NOAA leadership. To implement this outcome-based Planning phase, Program Operating Plans (POPs), Goal Strategic Portfolio Analyses (Goal SPAs), and a Corporate Strategic Portfolio Analysis (Corporate SPA) are developed.

The information gathered and analysis conducted during Planning allows for a smooth transition to the next phase in PPBES, Programming, during which resource allocations are recommended.

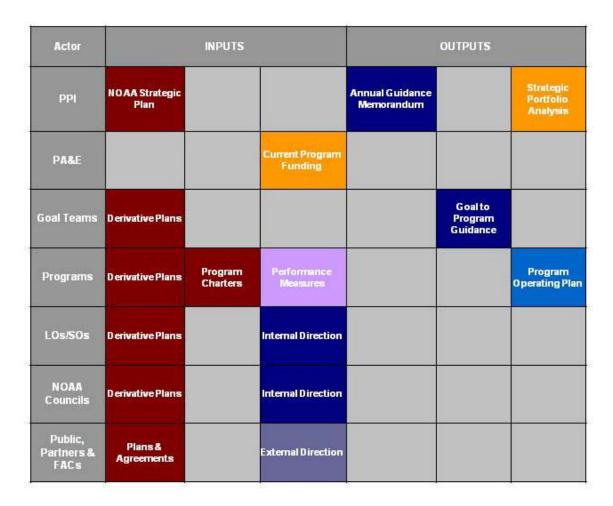
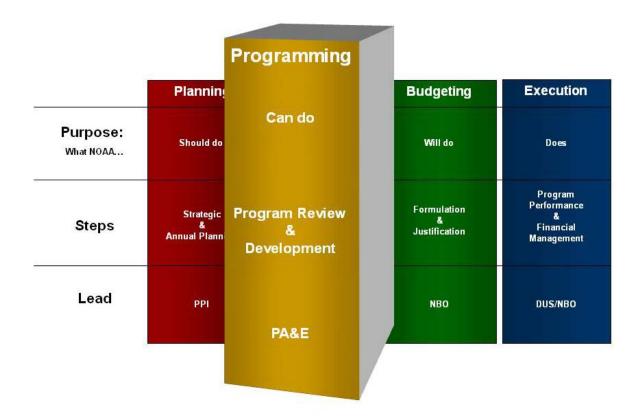


Figure 4.1.4.5-1 Inputs and Outputs of the Planning Phase

Analysis, Reports, Assessmer	ts	Оре	rating Plans (POPs, AOPs, BOPs)
Internal Direction, Guidance, M	lemos	Exte	ernal Direction
Stable Plans/Documents acros	ss phases (e.g. Strategic Plan, Charters)	Draf	t Documents to Administrator or Councils
Periodic Reviews/ Monitoring/	Tracking/ Performance Management	Fina	I Documents for external Consumption
Comments/Direction from OM	B, DOC, Administrator, or Councils		



The second phase in PPBES is Programming—the process of developing a 5-year programmatic and fiscal plan to support the achievement of NOAA's vision and mission as detailed in the NOAA Strategic Plan. The Programming process aligns available resources against validated and prioritized requirements. This process allows leaders to look across NOAA and apply effort and resources in the areas providing the greatest potential return on investment. Programming provides the recommended programmatic and fiscal basis for the NOAA budget.

Programming validates program plans for NOAA budget formulation

- Assesses ability to meet strategic goals and objectives
- Identifies critical capability gaps across all programs
- Provides resource allocation recommendations
- Ensures NOAA maximizes its investments to optimize its capabilities
- Provides foundation for development of the NOAA Budget

Programming is led by the Office of Program Analysis & Evaluation (PA&E) and is conducted in two phases: Program Review and Program Development.

During Program Review, current capabilities and capacities are compared with those needed for performing current and future missions to identify any gaps. These gaps may be characterized as capability deficiencies (a mission that cannot be accomplished with existing capabilities); capability excesses (unnecessary redundancy exists, or a specific capability is no longer needed); or capacity deficiencies or excesses (although NOAA can accomplish required tasks or missions, it lacks the ability to accomplish the right amount). This analysis underpins the process of Program Development.

During Program Development, the NOAA Program—an integrated, fiscally balanced 5-year plan based on the Goal and Sub-Goal program plans—is developed and approved. The NOAA Program shapes future NOAA capabilities and capacities to achieve NOAA's strategic goals.

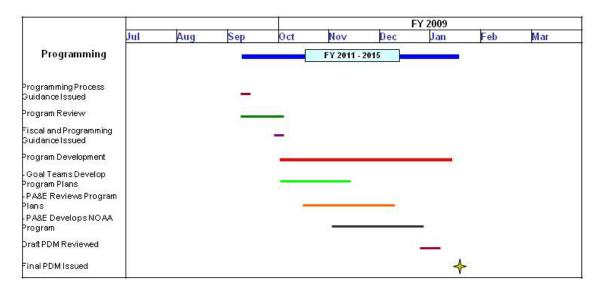


Figure 4.1.5-1 Overview of the PPBES Programming Phase Schedule

Programming integrates and balances resources across NOAA. It includes the analysis of alternative uses of people, technologies, and support systems, together with their multi-year resource implications and the evaluation of options. In this phase, program requirements are validated. In Program Development, the Goal Teams develop program plans based on the fiscal and programming guidance. These plans are then evaluated, and NOAA-wide resource decisions are made. Significant resource decisions are reflected in the Program Decision Memorandum (PDM), which is the basis for the NOAA Budget. The PDM in addition to funding adjustments may also be utilized to change processes, require additional documentation to adequately justify future investment, or identify other necessary coordination to improve the prognosis of success for specific investments. Publication of the PDM is the final step in Programming.

4.1.5.1 Program Review Process

The Program Review process analyzes the ability of the current NOAA Program to achieve, as efficiently and effectively as possible, objectives laid out in the Strategic Plan. The POPs (formerly referred to as Program Baseline Assessments) and SPAs developed during the Planning phase provide the programmatic foundation for the Program Review.

NOAA Program

The NOAA Program is an integrated, fiscally balanced, five-year plan reflecting all of NOAA's appropriated funds; it is not intended to be viewed outside of NOAA.

Multiple analytical techniques are used to review

POPs, including: requirements validation; cost, schedule, and performance analysis; return-on-investment analysis; and examination of execution and appropriation trends. The current NOAA Program is also reviewed for consistency with Department of Commerce and NOAA policy statements, the NOAA Strategic Plan, and the Annual Guidance Memorandum (AGM). Programs are also reviewed for effective and efficient business processes.

This analysis is then used to identify the strengths and weaknesses of the current NOAA Program, including not only Mission Goals but support capabilities, cross-cutting priorities, and areas of special interest to NOAA leadership. Also examined are programmatic alternatives requiring additional resources, and non-programmatic alternatives arising from changes to laws, potential interagency agreements, or changed operating procedures.

The results of the analysis performed in the Program Review process are used to develop recommendations for

Programming guidance provides guidance on major programmatic issues for use in the development of the program plans. Critical capabilities, deficiencies, and significant capacity gains for smaller investments (opportunities to leverage matching funds or places where one addition can benefit multiple programs) typically receive the highest priority.

Fiscal guidance provides the funding levels to be used in the development of the program plans. Development of fiscal guidance considers the current fiscal climate, historical appropriation levels, OMB guidance, and other relevant financial considerations.

program changes and are reflected in fiscal and programming guidance. www.ppbs.noaa.gov/programming.html

4.1.5.2 Program Development Process

Goal and Sub-Goal Program Plans and the NOAA Program are developed in this phase of the Programming process, and are based on the results of the Program Review. Program plans present the optimal way for a Goal or Sub-Goal to help NOAA achieve its strategic goals and future directions as detailed in the Strategic Plan and the AGM. Program plans consider the requirements identified in POPs for both mission and support capabilities, and provide a plan for integrated, end-to-end capabilities, across all the programs in the Goal or Sub-Goal. Program plans consider programming guidance, are fiscally balanced, and are expected to use creative

solutions and integration to optimize the investment of NOAA's limited resources for NOAA's future across all the programs in the Goal or Sub-Goal.

PA&E analyzes the program plans and develops the NOAA Program. Just as the goal and subgoal teams analyzed requirements and presented integrated capabilities across programs, PA&E analyzes requirements and integrates capabilities across Goals and Sub-Goals. Recommended program, policy, or process changes to achieve the optimal NOAA Program are presented to the NEP and the NEC for their review and recommendation to the Under Secretary.

Program, policy, or process changes to the current program, agreed to by the NEC, are incorporated into the Program Decision Memorandum (PDM). The PDM, once approved by the Under Secretary, provides the baseline for preparing the NOAA Budget.

4.1.5.3 Program Review and Development Roles and Responsibilities

Office of Program Analysis and Evaluation (PA&E) conducts and oversees the Programming phase, including:

- Conducts the Program Review to assess the current state of the NOAA Program.
- Presents the results of the Program Review and makes recommendations to the NEP and NEC for major programmatic changes and priorities.
- Presents, for approval by the Under Secretary, recommended future funding levels.
- Using the decisions made by the NEC and the Under Secretary, develops and issues fiscal and programming guidance.
- Oversees the development of the program plans. Provides advice and guidance to the Goal and Sub-goal Teams while the program plans are developed.
- Develops the NOAA Program.
- Approves/disapproves minor issues and changes to the NOAA Program.
- Analyzes the methodology, assumptions, and approaches used to address requirements in the program plans, and presents recommendations for major changes to the program to the NEP and NEC.
- Drafts the PDM based on the decisions and input of the NEP and NEC, and submits it to the Under Secretary for approval.

The Under Secretary of Commerce for Oceans and Atmosphere approves the fiscal guidance that is subsequently disseminated to the Goal and Sub-Goal teams for use in developing program plans, and approves the NOAA Program and the PDM.

The NOAA Executive Committee (NEC) reviews and approves the priorities and major programmatic changes that will be reflected in programming guidance, and approves the NOAA Program.

The NOAA Executive Panel (NEP) reviews and recommends approval to the NEC of the priorities and major programmatic changes that will be reflected in programming guidance, and reviews and recommends approval of the NOAA Program to the NEC.

Councils assess program plans for consistency with NOAA policy and priorities, and provide recommendations to NOAA leadership for changes in their areas of responsibility.

Line and Staff Offices (LOs/SOs) provide their Integrated Priority Lists to the Goal Teams. They provide additional data or respond to questions during the Programming phase, and assist Goal and Sub-Goal Teams in the development of the program plans and the NOAA Program by providing additional data or responding to questions.

Goal and Sub-Goal Teams develop program plans and assist in the development of the NOAA Program by providing additional data or responding to questions as needed.

Program Managers (PMs) provide additional data or respond to questions during the Programming phase, and provide subject matter expertise and assistance to the Goal Teams in the development of their program plans.

The Office of Program Planning and Integration (PPI) helps PA&E conduct the Program Review and develop programming guidance, and assists PA&E in the development of the NOAA Program.

The Chief Financial Officer (CFO), in concert with the relevant budget offices, assists PA&E in the conduct of the Program Review, provides input to PA&E on the development of fiscal guidance, and also participates in the development of the goal and sub-goal program plans, assists PA&E in the development of the NOAA Program, and provides input on the executability of the PDM.

Additional resources can be found at www.ppbs.noaa.gov/programming.html

4.1.5.4 Programming Phase Conclusion

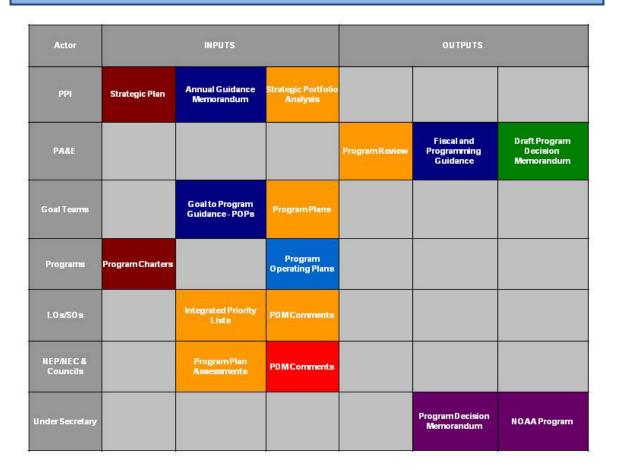
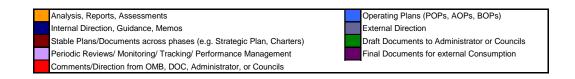


Figure 4.1.5.4-1 Inputs and Outputs of the Programming Phase





This section provides an overview of the budgeting process NOAA uses to determine the resources required to meet its program commitments, justify these requirements through various review levels, determine the impact of revised resource levels, and execute the program at the approved funding level.

The law requires the President to submit a budget to Congress annually. Congress considers the recommendations and uses the information included in the budget as it drafts and passes laws that affect spending and revenue. Through this process the government determines how much money to spend, what to spend it on, and how to raise the money it has decided to spend.

During budget formulation, the Executive Branch prepares the President's budget. OMB and Federal agencies begin preparing the next budget almost as soon as the

The Budgeting phase consists of budget formulation and justification

- Develop executable budget to support NOAA's mission
- Integrate performance metrics and budget requests
- Defend the NOAA Budget during external reviews
- Defend the President's Budget
- Develop LO and program allocations based on final appropriation and Budget Formulation

President has sent the most recent one to Congress. Typically, OMB officially starts the process by sending planning guidance to Executive Branch agencies in the spring. The President 56

completes this phase by sending the budget to Congress, usually in early February of the following year.

Formulation Division Objectives

- Provide reviewers with satisfactory information to conduct informed analyses of NOAA requests
- Ensure NOAA Program justifications are presented effectively
- Ensure NOAA resources will be applied to programs having the highest priorities
- Ensure proposed funding levels for NOAA programs meet criteria (e.g. economy, effectiveness, and national need)

The NOAA Chief Financial Officer (CFO) manages NOAA's PPBES Budgeting phase. Budgeting consists of budget formulation and justification. The goal of budget formulation is to prepare, justify, and defend a financial plan for upcoming years that commits current and future resources in the most efficient manner to accomplish NOAA's goals and priorities consistent with NOAA's Strategic Plan. The Budget formulation process begins with the NOAA PDM and incorporates legislative changes, emerging requirements, and fiscal guidance into NOAA's budget and ensures compliance with the Department of Commerce and OMB policies, priorities, and directions. This process is led by the Budget Formulation

Division of the NOAA Budget Office (NBO) and involves all Line Offices and Staff Offices in NOAA.

4.1.6.1 Budget Formulation Goals and Responsibilities

The Budget Formulation Division directs and manages the full range of formulation, presentation, and defense of the NOAA Budget. This division is also responsible for transforming the NOAA Program into a statement of resource requirements to be presented and justified to internal and external reviewers. The levels of oversight for budget formulation and review include NOAA, Department of Commerce, OMB, and Congress. The results of this process are the enactment of appropriations by Congress, approval of the legislation by the President, and establishment of an operating budget that will serve as the basis for subsequent budget execution.

Formulation Division Responsibilities

- Interpret and implement DOC and OMB budget formulation directives
- Promulgate NOAA/DOC/OMB budget guidance and policy
- Manage Formulation of the NOAA Budget
- Develop and publish NOAA Budget instructions/handbook
- Develop, prepare, and issue Budget Formulation Schedule and Calendar of Events and Milestones
- Provide input to Outreach and Communications Division in preparation for Congressional budget hearings and related press and constituent briefings
- Coordinate preparation of the Secretarial, OMB, and congressional budget submissions

Budget Justification to the Department of Commerce

NOAA's budget justification request to DOC is a link in a continuous process of financial resource management and decision making. NOAA's budget justification clearly documents program gaps, alternatives, and options as approved by NOAA leadership with respect to meeting Strategic Plan goals. The Office of the Secretary is provided with a justification that is comprehensive and fully conforms to the guidance set forth by OMB. Following submission of the budget request to OMB and Congress, the Budgeting phase ends with congressional appropriation that is signed by the President.

4.1.6.2 Budget Calendar

The budget formulation sequence of events describes the activities involved in submitting the NOAA Budget to DOC, OMB, and Congress for approval and enactment.

Figure 4.2.6.2-1 shows the interaction of the offices and the sequence of events in an approximate budget calendar.

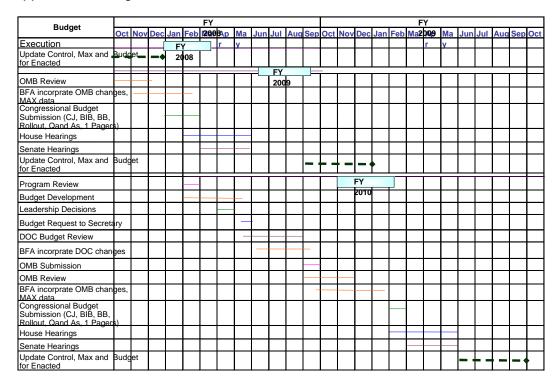


Figure 4.1.6.2-1 The Budget Calendar shows the timing and sequence of events, offices, and submissions for budget review.

Budget Formulation Sequence of Events

- Develop and submit Secretarial Budget to DOC
- DOC passback and appeal
- Develop and submit OMB Budget
- Program Assessment Ranking Tool (PARTs)
- Performance and Accountability Reporting (PAR)
- GAO/OIG, PARTweb and OMB Open Recommendations Reporting
- OMB passback and appeal
- Develop and submit Congressional Budget
- Rollout of NOAA's President's Budget Request
- Defense of President's Budget
- Congressional hearings
- House and Senate mark-up of President's Budget submission
- Conference Report/fiscal year
- Enacted Budget

4.1.6.3 PPBES Budget Linkages

Planning and Programming Phases

During these phases of the PPBES, the budget is linked to the NOAA Strategic Plan to meet OMB's requirements for effective governmental planning and management. The Annual Guidance Memorandum (AGM) is developed to document the organization's priorities and start PPBES for the appropriate budget year. The NOAA Program created by the programming process in PPBES provides the detailed foundation for budget development.

Budgeting and Execution Phases

During these phases of PPBES, the budget focuses on near-term fiscal requirements. Budget Formulation should produce an executable budget to meet mission requirements and actual program costs. Key documents in this phase are the Secretarial, OMB, and Congressional

Formulation Division responsibilities during Planning and Programming

- Validate the NOAA Program Structure funding breakout against the Budget Structure
- Consult with PA&E on development of fiscal guidance and Program Decision Memorandum (PDM) development
- Participate in Goal Team Program Assessments and Program Plans development
- Provide input to PA&E/PPI on executability of PDM and performance measure weaknesses

technical budget justifications; the Budget Summary (or Blue Book); and the Budget In Brief 59

(BIB). The Budget Formulation process begins with the NOAA PDM and incorporates legislative changes, emerging requirements, and fiscal guidance into budget language and a format that involves every element of NOAA. See Section 4.2.6.4 for a complete list of roles and responsibilities during the Budgeting phase.

Annual Performance Plan Requirements

The NOAA Strategic Plan is an important link between budget and performance. The Budget Division oversees the development of the Annual Performance Plan (APP) for NOAA, which provides this link and is required by the Government Performance and Results Act (GPRA). The APP is a summary of NOAA's performance goals as outlined by the Strategic Plan, associated GPRA measures, targets, and resources available to and requested by NOAA to achieve its stated goals and measures. Its

Elements of the Annual Performance Plan

Section 1. Mission

Section 2. Corresponding DOC Strategic Goal and

Objective/Outcome Section 3. PART Summary

Section 4. Priorities/Management Challenges

Section 5. Target and Performance Summary

Table; Validation and Verification

Section 6. FY 2010 Program Changes

Section 7. Resource Requirements Summary

primary function is to summarize the specific results an agency commits to achieve for a given fiscal year's budget.

Specific Areas of Focus for Budget Request Review

- Clarify information submitted in the requests and obtain supplementary information where needed
- Identify policy for resolution at higher levels
- Rank program changes using a pre-set scoring system based on 1) Ability to Execute; 2)
 Administration and Congressional Priorities; 3) Linkage to Performance Measures; and 4)
 Justification
- Evaluate LO/Goal Team rankings of program changes
- Make recommendations to the CFO

Analysis of Budget Justifications

The NOAA Budget Office reviews budget requests with the objective of resolving as many potential issues as possible. At the same time, it develops detailed analyses and documentation for NOAA senior management, the Deputy Under Secretary, and the Under Secretary. These analyses support informed and fact-based decision making on proposed program increases. The NOAA Budget Office reviews narrative justifications and exhibits to ensure all proposed program

increases are in accordance with the intent of the PDM, and consults with the LOs/SOs to resolve any perceived discrepancies.

Final Review and Approval of Budget Request Submission

Once approved by the NEC and the Under Secretary, NOAA submits its budget request to the Secretary of Commerce. The DOC Office of Budget assists the Secretary and other DOC officials in making critical judgments, and producing realistic and sound decisions regarding the Department's budget-year plans and OMB budget and planning requests.

DOC Office of Budget

- Directs and coordinates preparation, review, and submission of the Department's budget request
- Prepares Department-wide summaries and analyses
- Monitors the progress of budget preparation and reviews schedules for material requirements and hearings
- Consults with OMB and designated bureau budget officers on technical budget matters, interpretations of Circular A-11 and related OMB directives, and on scheduled and other requirements for budget preparation and review

Final Review and Approval

4.1.6.4 Budget Formulation Roles and Responsibilities

NOAA's Budget Formulation and Analysis Division (BFA) of the NOAA Budget Office is the lead for managing NOAA's process for identifying and acquiring its annual budgetary resources. BFA leads the formulation of NOAA's budget; develops overall budget guidance, reviews budget proposals, and supporting justification and documentation; conducts program analysis to support the planning, budget, and resource management functions; identifies major issues affecting NOAA's programs; and provides for the proper allocation and control of all budgetary resources as required by relevant statutes, and as specified by the Office of Management and Budget. In addition, BFA is source of all budget formulation numbers of record for use in the Planning, Programming and Budgeting phases of PPBES for all budgetary tables including OMB's Budget Control System (MAX), exhibits and displays, maintaining and utilizing data, both current and historical, on budget authority. BFA works with the Outreach and Communications Division in preparation for Congressional budget hearings and related press and constituent briefings. The BFA conducts and oversees the Formulation of the NOAA budget submission step of the Budgeting phase which includes:

- Defining roles and responsibilities in the budgeting process, sets the annual budget schedule, ensures the budget maintains alignment with the Strategic Plan, and develops and issues budget guidance memorandums in conjunction with PA&E and PPI
- Tasking the LO and SO Chief Financial Officers/Budget Chiefs to accomplish the necessary work, with the assistance of the Goal Leads
- Reviewing budget justifications and produces written analyses and recommendations for the CFO for presentation to the NEP/NEC
- Scheduling the NEC meeting and develops the necessary documentation to demonstrate the alignment of budgetary decisions with approved programming plans, and alignment of performance measures with the strategic goals
- Establishes and tracks the controls that guide resources
- Ensures that budget products are consistent with programming decisions and can be executed
- Adjusts for changes and factors in known externalities
- Schedules and prepares final budget decision materials for the Deputy Under Secretary, the NEC, and the Under Secretary
- Prepares the Secretarial, OMB, and Congressional budget submissions
- Reviews and coordinates the development of annual performance plans/PART submissions
- Ensures any new performance measures created during the Budgeting phase supports the goals, strategies, outcome measures, and measures for success contained in the NOAA Strategic Plan, and reviews budget guidance memorandum(s) for consistency with the NOAA Strategic Plan.

Under Secretary of Commerce for Oceans and Atmosphere approves the final budget and directs the CFO to execute decisions through the budget process and the issuance of the Budget Decision Memorandum.

LOs/SOs prepare the required justifications for the requested program increases, prepare and present budget estimates aligned to both the budget structure and Strategic Plan goals, present budget estimates to the CFO, revise budget estimates in accordance with Budget Office guidance, respond to ad hoc questions from budget reviewers and prepare appeals as necessary.

Goal Leads review and consider constituent and stakeholder input; update requirements of cross-cutting goals; develop plans and supporting performance measures that identify and link the programs and goals, strategies, and outcome measures in the NOAA Strategic Plan; estimate the base resource requirements and new program requirements and work with the PPI, PA&E, and LO/SO Chief Financial Officers/Budget Chiefs to develop sound fiscal budget requests.

Program Managers assist with LO budget preparation; assist with program development and maintenance of the program portion of the Strategic Plan Budget View based on PDM and

subsequent guidance/decisions; represent the program portion of the budget through the cycle; recommend any needed changes in distribution of program resources based on decisions through the cycle, as needed; develop and coordinate with LOs an Annual Operating Plan (AOP) and assist with the development of LO AOPs.

PA&E consults with program managers and budget formulation analysts in the development of the annual budget submission.

Chief Financial Officer (CFO) prepares the annual budget submission and leads NOAA Executive Committee review, discussion and approval of the budget submission to the Department of Commerce (DOC) from the NEP/NEC. Supports the review and decisions made on the budget submission as it passes through the DOC and Office of Management and Budget.

4.1.6.5 Budgeting Phase Conclusion

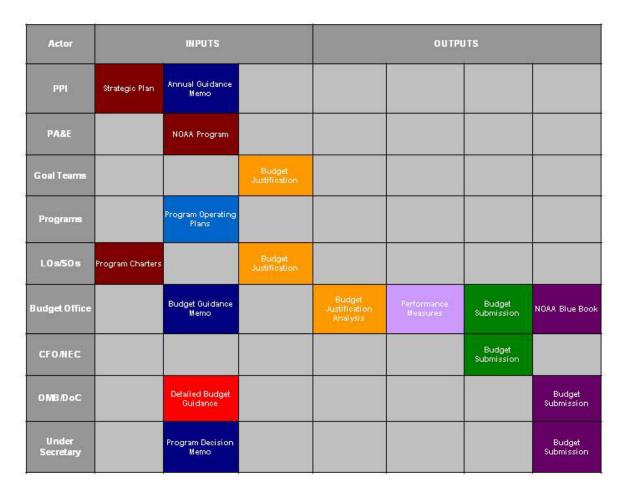


Figure 4.1.6.5-1 Budgeting Phase Inputs and Outputs

Analysis, Reports, Assessments	Operating Plans (POPs, AOPs, BOPs)
Internal Direction, Guidance, Memos	External Direction
Stable Plans/Documents across phases (e.g. Strategic Plan, Charters)	Draft Documents to Administrator or Councils
Periodic Reviews/ Monitoring/ Tracking/ Performance Management	Final Documents for external Consumption
Comments/Direction from OMB, DOC, Administrator, or Councils	_

	Planning	Programming	Budgeting	Execution
Purpose: What NOAA	Should do	Can do	Will do	Does
Steps	Strategic & Annual Planning	Program Review & Development	Formulation & Justification	Program Performance & Financial Management
Lead	PPI	PA&E	NBO	DUS/NBO

The Execution phase is where all the Planning, Programming, and Budgeting come together to produce results

- Match plans to resources
- Document expectations of performance
- Provide feedback
- Ensure accountability
- Produce results
- Apply lessons learned

Execution, the final phase in PPBES, is the process by which financial resources are made available to NOAA and are directed and controlled toward achieving goals and objectives for the NOAA Program. Budget Execution is the performance phase of the overall budget process, where NOAA programs are carried out within approved budget levels through the use of effective funds control and financial management. This phase is critical to ensure that NOAA can deliver the products and services that have been planned, programmed, and budgeted for.

During this phase plans are matched to resources, performance measures and expectations are documented, performance reviews are conducted to glean information to improve processes and ensure accountability, program results are achieved, and lessons learned are documented for future plans and programs.

Preparation of the key Execution phase documents—Annual Operating Plans (AOP) (Appendix D - Templates) and financial operating plans—begins months in advance of the execution year. Ideally, NOAA would receive *an appropriation* before the start of the fiscal year. Without an 65

appropriation, NOAA's Execution planning is based on a Continuing Resolution (CR) as passed by Congress and signed by the President. These plans are then updated based on the final appropriation. Figure 4.1.7-1 illustrates the timing of Execution phase activities (note: dashed lines represent uncertainty in timing for final appropriation/Continuing Resolution).

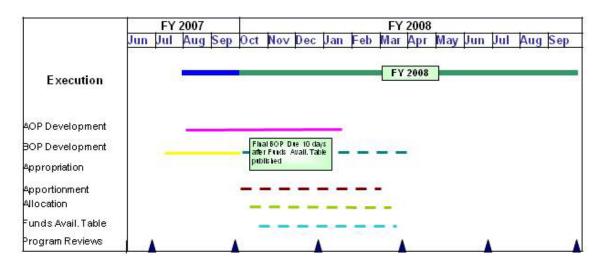


Figure 4.1.7-1 Overview of the PPBES Execution Phase Schedule

After AOPs are developed and finalized, execution of the budget against the AOPs commences. Budget Execution is the performance phase of the overall budget process, applying, managing, and accounting for approved program funds, appropriated by Congress, and NOAA resources required for the agreed programs. For the Budget Office, this process includes allotting funds, disbursing funds with appropriate reporting and review, managing resources throughout the fiscal year, reprogramming resources, performing reapportionment, conducting a year-end close out of the fiscal year, and, preparing the NOAA Annual Business Report.

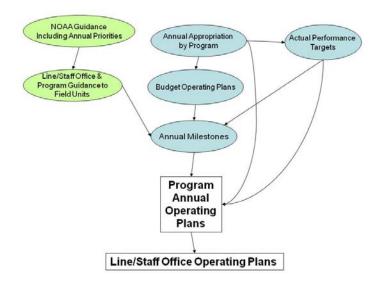


Figure 4.1.7-2 Execution Year Reports

NOAA program managers, LOs, and SOs are responsible for effective funds control and financial management in implementing and administering programs within approved budget levels. For the programs, elements of execution include implementation, work assignments, reporting on performance on a periodic basis (monthly, quarterly, and/or annually), comparison of actual performance against the Program Plan, and development and implementation of changes required to more closely align actual performance with planned performance.

4.1.7.1 Execution Roles and Responsibilities

NOAA's Budget Execution Division (BEX) has overall responsibility for fiscal accountability and reporting of appropriated resources, allocating funding, tracking and reporting spending, providing information to formulation, maintaining of official fiscal records for NOAA including monthly, quarterly and annual internal and external reports. BEX exists to ensure NOAA's execution stage (current fiscal year planning and obligating of the budget) is in compliance with all applicable OMB-Circulars. BEX tracks and reports current year data for all internal NOAA customers, and external customers, such as DOC and Congress. NOAA's Table of Organization is the responsibility of BEX and is used by NOAA management for the tracking of approved on-board positions. BEX also supports CBS implementation of upgrades and new modules. All NOAA policies and procedures for Budget Execution are created and approved by BEX before implementation NOAA-wide. BEX conducts and oversees the Execution phase:

- Preliminary planning in anticipation of appropriations
- Submission of base target funding amounts prior to enactment of appropriations
- Enactment of appropriations
- Apportionment and allotment of funds
- Issuance of Funds Available Table
- Ongoing budget execution activities such as monitoring of financial performance, fund transfers, reprogramming, and monthly and quarterly management reviews

LOs/SOs develop LO AOPs (including Corporate Performance Measures Milestones); submit to CFO; provide monthly/quarterly reports, quad charts and execution briefings as directed. Initial input of BOPs are made on the basis of actual appropriations and apportionments. LOs conduct program evaluations to ensure compliance with mandates and to foster the most effective management possible.

Councils provide policy and guidance on cross-cutting functional areas.

Program Managers develop AOPs; assist with the development of LO AOPs; generate monthly and quarterly reports (e.g. quad charts) including progress on Corporate Performance Measures Milestones, and brief NEP on cost, schedule and performance as requested.

Chief Financial Officer (CFO) oversees the recording of monetary data (e.g. accounting codes, etc.) in NOAA accounting systems.

4.1.7.2 Execution of Annual Budget

Budget Office prepares:

- Apportionments
- Allotments
- Rescissions
- Deferral allotments
- ❖ Funds Available Table

Executing the annual budget requires that financial managers and budget officers be in close contact with the LOs/SOs and program managers so that all funds are apportioned, allotted, and obligated correctly. Financial Management Centers (FMCs) are a significant resource for the LOs/SOs as they assist with day-to-day financial management and liaise with the Budget Office, as well as provide insight into corporate fiscal processes and requirements for budget execution. Following are descriptions of some key concepts for Execution of the annual budget.

Apportionments

Except in a few cases as provided by law, funds contained in appropriations legislation and other funds (including reimbursements, recoveries of prior year funds, and carryover funds) may not be obligated until they are apportioned. (See Section 120 of Circular A-11 for additional information on exceptions.) Apportionment requests prepared by agencies are not valid until OMB approves the apportionment. Usually, the signature of the appropriate OMB official constitutes approval. Exceptions are emergencies involving the safety of human life or the protection of property (for which OMB may provide telephone approval of apportionments under Section 120.36 of Circular A-11) and adjustments not requiring submission of a reapportionment request and those considered to be "automatically apportioned" as provided under Section 120.36 of Circular A-11 (i.e., under a CR).

Allotments

An allotment is an administrative device for authorizing and controlling the amount of funds that may be used from an appropriation for a specific period of time. An allotment of funds available by program by quarter for each NOAA appropriation and fund is issued by the Budget Office to LOs/SOs through the Commerce Business System (CBS) Allotment Transaction screen.

Rescissions

A rescission is enacted legislation that cancels previously enacted budget authority before the authority would otherwise lapse. A rescission may be proposed by the President or a member of Congress. A rescission proposed by the President must be approved by both houses of Congress within 46 days of continuous session in order to take effect.

Deferrals

A deferral is any action or inaction by an officer or employee of the Federal Government that temporarily withholds, delays, or effectively precludes the obligation or expenditure of budget authority. A deferral occurs unless both houses of Congress pass a resolution disapproving it.

Funds Available Table

The Table delegates to the LOs/SOs the authority to incur obligations up to stated appropriated amounts, and supersedes any internal instrument. The Table is issued by the NOAA CFO, by delegation of authority of the Under Secretary, following the apportionment of funds by OMB.

4.1.7.3 Appropriations

The authority permitting NOAA to carry out its various program activities comes from two separate types of enacted legislation—authorizing legislation and the Appropriations Act.

Authorizing legislation provides the basic framework and statutory authority for NOAA to conduct its program functions. Authorizing legislation may either extend a program f an indefinite period of time or provide a stipulated expiration date. In addition, authorizing legislation may impose a dollar limitation or ceiling on appropriations. Authorizing legislation, which does not provide funding, is necessary before an Appropriations Act may be passed. Numerous individual acts comprise the authorizing legislation for NOAA programs.

The Appropriations Act, on the other hand, provides the authority to incur obligations and to make payments out of the Treasury for NOAA to carry out its authorized programs. NOAA's Appropriations Act contains obligation authority for each of NOAA's direct appropriation accounts.

4.1.7.4 Allocation

Once funds are authorized and appropriated, they may be allocated to LOs/SOs. An allotment (described above) available for each Program, Project, or Activity (PPA)—by quarter, by FMC, for each NOAA appropriation and fund—is issued by the Budget Execution and Operations Division to LOs/SOs through the Commerce Business System (CBS) Allotment Transaction screen. Such allotments must be consistent with NOAA's OMB-approved apportionments.

CR targets are issued to Assistant Administrators and Directors of major organization elements for direct appropriated funds, usually at the Line Office level by the Budget Execution and Operations Division prior to the actual enactment of appropriations. Targets are issued to ensure that funds are available during a CR. They are issued in July of the current fiscal year in anticipation of the next fiscal year to prepare for any obligations that will be incurred at the start of the new fiscal year.

Once actual appropriations are known, the differences between the target and appropriated amount (program change) of allotments are entered. The LOs/SOs have approximately 10 working days following issuance of the Funds Available Table to provide their FMCs with suballowances. BOPs are submitted 30 days after enactment.

4.1.7.5 Resource Management

There are necessary limits and controls on the obligation and expenditure of resources. The Funds Available Table delegates to the LOs/SOs the authority to incur obligations up to specified quarterly amounts and supersedes any internal instrument.

The Table is issued by the CFO, by delegation of authority of the Under Secretary and after apportionment of funds by OMB. Exceeding an obligational allowance is a serious matter, as it could result in an anti-deficiency—a violation of appropriations law. Officials who exceed their allowances may be subjected to disciplinary action. In addition, a funding penalty may be assessed against the following fiscal year's allowance. Any official exceeding an allowance must submit a written report to the CFO explaining the circumstances associated with the violation, which individuals were involved or responsible, and remedial actions taken to preclude further occurrences. This report must be submitted within 30 days after official notification of a violation.

The LO/SO may "sub-allow" funds to its own FMCs or another LO/SO. However, the AA/Staff Office Director is responsible for controlling any sub-allowed funds to ensure they are not over-obligated by FMCs. Such sub-allowance procedures by each LO/SO must be adequately documented.

The Budget Execution and Operations Division staff is responsible for issuing and monitoring all appropriation allowances to ensure that the sum of all allowances do not exceed the funds available from all sources for each account.

4.1.7.6 Fiscal Year Operating Plan

The Annual Call for BOPs communicates specific guidelines and instructions to LOs/SOs and provides them with obligational fund targets to enable them and their FMCs to complete and submit their BOPs to the Budget Execution and Operations Division shortly after enactment of the appropriation.

BOPs are detailed schedules of the timing and purpose of planned obligations that provide a basis for fund apportionment requests and supporting documentation to OMB. To support BOP development, the Budget Office develops and issues LO/SO yearly obligational targets, as appropriate, through the Funds Available Table shortly after enactment of the appropriation. The LO/SO then develops quarterly and monthly targets for each of its FMCs. Each budget target developed at the LO/SO level, and issued to an FMC, will generate a corresponding BOP submission by FMC by month. The general rule is that FMCs will prepare one BOP for each line item in each appropriation for which funds are provided. FMCs prepare, review, and verify BOPs before submission to the LO/SO, and coordinate with other FMCs when BOPs involve a transfer.

The LO/SO then reviews, verifies, and approves all BOPs prepared and submitted by FMCs to ensure that the BOPs are consistent with obligational allowances and overall program-level authorizations. LOs/SOs also monitor BOPs for compliance with deadlines for planned submissions in the Annual Call and the processing schedule, and any other NOAA Finance and Administration calls, such as pay raise supplementals or new programs.

4.1.7.7 In-Progress Review

Quarterly Review provides insight into Programs

- Monitor LOs/SOs' obligational progress by PPA and by NOAA program
- Identify potential problems so that timely, remedial action may be taken
- Monitor LOs/LOs' employment status and full-time equivalency (FTE) status

The Budget Execution Review provides the Under Secretary, NOAA CFO, and NOAA top-level management with the opportunity to review NOAA's financial, FTE, and employment status and other management-controllable topics. The main purpose of these monthly/quarterly reviews is to examine the obligational status of each program by comparing actual verses planned obligations on a cumulative basis for all appropriations by Activity, Sub-Activity, and PPA. The results of this comparison provide top-level management with information necessary to ensure that NOAA remains within its apportionment limits.

4.1.7.8 Performance and Accountability Report

On an agency level, the Performance and Accountability Report (PAR) provides an accounting of DOC's financial and performance results, enabling the President, Congress, and the American people to assess the Department's performance. The PAR includes a detailed discussion and analysis of the Department's performance for the fiscal year. Each organization within the Department, including NOAA, reports their results under one of DOC's four Strategic Goals. NOAA contributes to the Department's goal to "Observe, protect, and manage the Earth's resources to promote environmental stewardship."

4.1.7.9 Reprogramming

Reprogramming is the transfer of budgetary resources within an appropriation or fund account from one PPA to another to meet changed requirements or priorities. Resources may include both funding and personnel.

The NOAA CFO's Office has the responsibility for processing all reprogramming actions, disseminating and processing related information, and maintaining program and resource controls and records in support of both budget formulation and execution. AAs advise and make recommendations to the Under Secretary for proposed reprogramming actions in their respective areas. LOs/SOs are responsible for developing budget estimates that support their obligational fund control targets on a line item and total appropriation basis,

Requirements for Reprogramming approval

- A PPA is eliminated
- A PPA has been denied or restricted by Congress
- Major office or employee relocations occur
- Functions or activities currently performed by Federal employees are outsourced or privatized
- Offices, programs, or activities are reorganized

and when changes in requirements become known, they are responsible for initiating prompt action on reprogramming. Reprogramming actions initiated by LOs/SOs are governed by the policy limitations described below.

Assistant Administrator's Reprogramming Authority

For reprogramming the activities in the first five bullets of the adjacent text box, Assistant Administrators may reprogram without prior approval of the NOAA CFO such dollar amounts and personnel positions as are necessary to ensure effective program management, provided that such reprogramming do not change the PPA level during the fiscal year by more than \$100,000, or more than four full-time permanent positions, or more than 10 percent of the PPA level (whichever is lower), or involve facility or procurement items specifically authorized by Congress, regardless of the dollar amount, per single transaction during the fiscal year. All reprogramming proposals initiated within the Line/Staff Office should be forwarded to the appropriate Assistant Administrator.

Any proposed reprogramming in excess of the above thresholds must be approved in advance by the NOAA CFO. Approvals greater than \$100,000 must be submitted to the NOAA CFO for approval. In accordance with the FY 2006 Omnibus appropriation, the Congressional notification threshold for reprogramming is \$750,000. If it is greater than \$750,000 and/or 10 percent of the budget amount than Congressional notification must be given.

All reprogramming requests are forwarded to the NOAA CFO. The CFO also coordinates with DOC when reprogramming approval from a higher level is required. Any reprogramming must be authorized and approvals obtained before any action is taken.

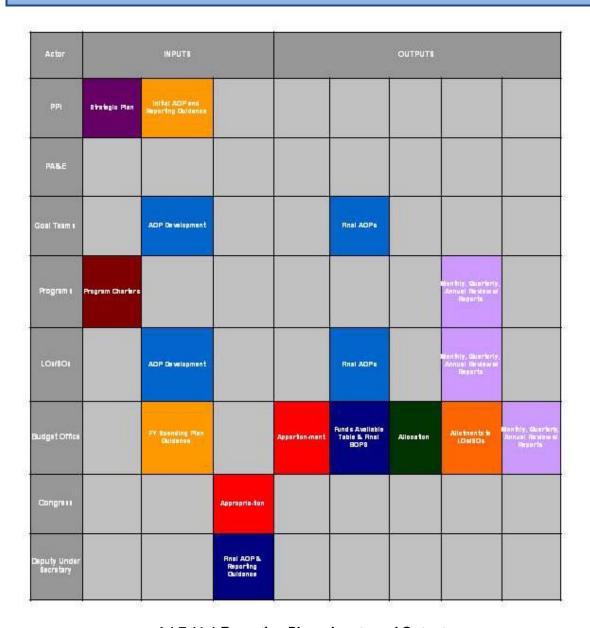
4.1.7.10 Reapportionment

Once reprogramming approval is obtained, any changes in available resources requiring a reapportionment must be submitted to OMB. If the change is the result of legislation providing budget authority after the initial apportionment was made, the request is due to OMB within 10 calendar days of enactment. In other cases (i.e., significant change in reimbursements or recoveries), the request must be made in time to allow action by OMB before the revised amounts are needed for obligation.

Given the complex nature of reapportionment, requests should be submitted at least 1 month before the funds are needed. Although apportionment action for a specified time period may not be changed after the end of the period, unobligated balances of amounts previously apportioned are available for obligation in later periods within the fiscal year, unless specified by OMB.

Regardless of the circumstances of a reapportionment, all requests must be accompanied by current financial plans and narrative explanations.

4.1.7.11 Execution Phase Conclusion



4.1.7.11-1 Execution Phase Inputs and Outputs

Analysis, Reports, Assessments	0	perating Plans (POPs, AOPs, BOPs)
Internal Direction, Guidance, Memos	E	xternal Direction
Stable Plans/Documents across phases (e.g. Strategic Plan, Charters)	D	raft Documents to Administrator or Councils
Periodic Reviews/ Monitoring/ Tracking/ Performance Management	Fi	nal Documents for external Consumption
Comments/Direction from OMB, DOC, Administrator, or Councils		

4.1.8 YEAR-END CLOSE-OUT

At the end of the fiscal year, all appropriated funds are reconciled against the projects to which they were allocated. This process begins with programs and their finance offices maintaining current financial reports throughout the year, based on criteria set forth in AOPs, developed and implemented at the beginning of the fiscal year. This information is periodically reviewed by LOs/SOs to verify that the information is correct, and that all reports submitted have been entered into the Commerce Business System (CBS) accurately. Late in the fiscal year, the CFO's office issues guidance for year-end closeout. A typical schedule is shown in Figure 4.1.8-1. Included in this guidance is a schedule of final dates for reporting obligations and expenditures. These obligations and expenditures cover all of NOAA's programs and operations, including payroll, facilities management, utilities, travel, contracts, and telecommunications.

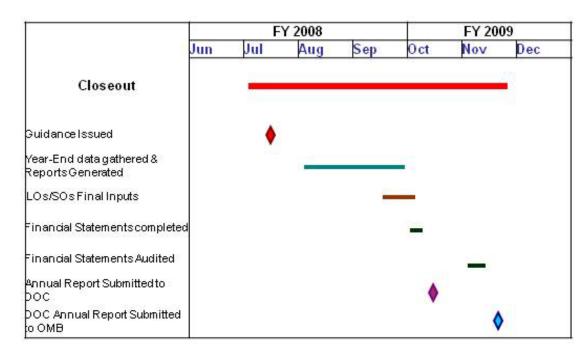


Figure 4.1.8-1 Typical schedule of year-end closeout and annual report activities.

4.1.8.1 Closing Out a Fund at Year-End

Four types of funds are subject to year-end closing activities: (1) direct appropriation, (2) expired balances, (3) cancelled authority, and (4) reimbursable authority (with or without advances).

Direct Appropriation

NOAA closes out apportionments and allotments-realized resources to the unapportioned authority available account. Delivered orders that have been paid for, downward adjustments of prior year obligations that have been paid, other appropriations realized, permanent reductions of new budget authority, and prior year balances and transfers (in and out) are closed to reflect total actual resources collected. Anticipated resources are also closed out.

Expired Balances

Allotments expired authority remains available for an additional 5 years to cover any upward adjustments for existing obligations. At the end of the 5 years, all remaining authority unpaid (expired and unexpended obligations) are canceled.

Canceled Authority

NOAA cancels all authority (paid and unpaid) as of September 30 for canceled appropriations. These balances are unavailable for obligation or expenditure. The account statement must reflect a positive or zero balance for all canceling appropriations. On the fourth quarter FACTS II submission, before an appropriation is closed, NOAA will present all unobligated and obligated balances, including payables and receivables, as canceled.

Reimbursable Authority

NOAA closes anticipated reimbursements and other income to anticipated resources. Reimbursements and other income earned-collected are closed to total actual resources-collected. Delivered orders (paid) are closed to total actual resources-collected. Any unexpired authority will be carried over to the next fiscal year. NOAA will review all agreements that expired as of September 30 and reduce the unfilled customer order balance as needed.

4.1.8.2 Carryover Funds

The total amount of NOAA carryover in each appropriation or fund account is determined by coordination of the NOAA Finance and Budget Offices and reported on the "Report on Budget Execution" (OMB SF-133).

The typical major appropriations with carryover funds are Operations, Research, and Facilities (ORF) and Procurement, Acquisition and Construction (PAC). Nearly every NOAA office charges these funds. Unobligated balances in these funds are controlled and monitored by the Budget Execution staff for each LO after the end of each fiscal year. The actual obligations, including all end-of-year manual financial adjustments, by PPA, are then subtracted from the funds available to arrive at LO/SO carryover. The sum of these differences plus any unallowed amounts will equal the total carryover by fund.

4.1.8.3 Audit

The Financial Policy and Compliance Division (FPCD) is responsible for audit coordination with the contract auditor. FPCD serves as the liaison between the contract auditor, the LOs/SOs, and DOC on the annual audit. As part of this function, FPCD monitors the progress of the Prepared

by Client (PBC) listing, which lists documents, schedules, and reports prepared for the contract auditor by the various LOs/SOS (including Finance). At the conclusion of the audit, FPCD ensures that corrective action plans are prepared for each of the recommendations in the contract auditor's Management Letter. Those corrective action plans are then monitored by the FPCD on a monthly basis. Further, an annual audit of selected NOAA Government Performance and Results Act performance measures from the DOC Performance and Accountability Report is conducted by the NOAA Auditor.

4.1.8.4 NOAA Annual Business Report

Once all financial data has been received, reviewed, and verified, the CFO's office provides a consolidated financial statement as the basis for the financial section of NOAA's Annual Business Report. The Annual Business Report is the link between NOAA's goals, mission, programs, statutory requirements, funding, and results and can be found at http://www.corporateservices.noaa.gov/~nbo/pdfs/FY07_NOAA_Business_Report.pdf

4.1.8.5 Audit Roles and Responsibilities

NOAA Budget Office oversees and is responsible for the Annual Business Report.

NOAA Chief Financial Officer (CFO) divisions are responsible for the following:

- Accounting Operations Division and the Financial Reporting Division are responsible for closeout at year-end.
- Financial Systems Division manages the planning, development, and implementation of the Commerce Business System (CBS) throughout NOAA. The Division ensures that the system adheres to the Chief Financial Officer Act (CFO), Government Performance and Results Act (GPRA), Joint Financial Management Improvement Program (JFMIP), Year 2000 Compliant and Information Technology Management Reform Act (ITMRA) legislation, and all applicable accounting, budget and management standards.
- Field Financial and Client Services Division standardizes field operations and performance through providing supervision and management to each of the Field Financial Management units. This Division coordinates line/staff office issues for the entire Finance Office.
- Financial Reporting Division consolidates financial reports from all NOAA offices, and generates the financial statement for review and acceptance by the DOC Office of Financial Management.
- Financial Policy and Compliance Division (FPCD) is responsible for audit coordination with the contract auditors. FPCD serves as the liaison between the contract auditor, the LOs/SOs, and DOC on the annual audit.
- Branch Finance Offices consolidate data from LOs/SOs to generate reports for submittal to NOAA CFO, Finance Office, and Financial Reporting Division.

L/O Budget Execution Staff controls and monitors unobligated balances in the ORF and PAC appropriations after the end of the fiscal year. The actual obligations, including all end-of-year manual financial adjustments, by PPA, are then subtracted from the funds available to arrive at LO/SO carryover. The sum of these differences plus any unallowed amounts will equal the total carryover by fund.

LOs/SOs submit all financial documents to the finance office and review reports in CBS to ensure accuracy.

References:

http://www.corporateservices.noaa.gov/~noaa/cfohome

www.corporateservices.noaa.gov/~finance/FY06FinalClosingInstructions.pdf

www.corporateservices.noaa.gov/~finance/FY%202006%20Due%20Date%20Calendar.pdf

4.1.8.6 Year End Close Out Conclusion

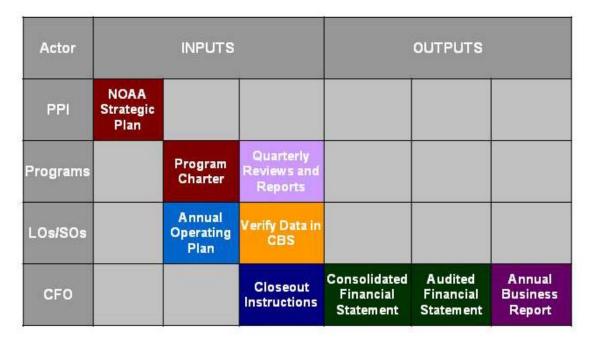
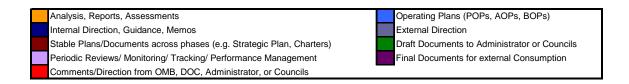


Figure 4.1.8.6-1 Year End Close-Out Inputs and Outputs



4.1.9 CORPORATE PERFORMANCE MEASURES

Performance management at the NOAA corporate level consists of a suite of Corporate Performance Measures (CPMs). These measures help the Under Secretary and senior management ensure the organization is moving toward strategic planning goals and outcomes and organizational priorities. CPMs focus on high-level program and goal outcomes and the performance objectives that lead to these outcomes. They serve to communicate NOAA's corporate performance to external audiences and provide a basis for the internal evaluation of NOAA's progress toward achieving the goals outlined in the Strategic Plan.

Corporate Performance Measures

Type	NOAA Office of Primary Reporting Responsibility	Contributing Organizations	Reported to
Government Performance and Results Act (GPRA)	NOAA Budget Office	Line Offices, Programs	DOC, OMB
President's Management Agenda (PMA)	NOAA Budget Office	Line/Staff Offices	DOC, OMB
Program Assessment Rating Tool (PART)	NOAA Budget Office	Line Offices, Programs	DOC, OMB
DOC Secretarial Priorities	NOAA Budget Office	Line/Staff Offices	DOC
Information Technology Management	NOAA CIO	Line Office CIOs	DOC, OMB
Satellite Management	NOAA Budget Office	NESDIS	DOC, OMB

4.1.9.1 Budgeting Phase Performance Reports

Quarterly "Plan for Success"

This quarterly report addresses progress on the following:

- President's Management Agenda (PMA) Executive Branch Management Scorecard
- Government Performance and Results Act (GPRA) Performance Measures
- OMB Recommendations (PART Improvement Plans)
- Optimal Service Delivery (Budget Business Process Re-engineering)
- Trade-offs
- OIG/GAO Recommendations Detailed Monthly Tracking Report

Annual Performance Plan (APP)

The APP operationalizes the Strategic Plan and is submitted each year to Congress along with NOAA's Budget toward DOC's contribution to the President's Budget. The APP defines performance goals and measures used to manage progress toward NOAA's four strategic mission goals. It describes in detail one fiscal year's resources and programmatic effort within a strategic context, including tracking open recommendations related to the past Program Assessment Rating Tool (PART) evaluations. The APP focuses on the DOC strategic goal to "Observe, protect, and manage the Earth's resources to promote environmental stewardship." It reiterates the proposed program changes in the Budget and articulates the metrics tracking achievement of performance goals for those investments.

Program Assessment Rating Tool (PART)

To support the President's Management Agenda (PMA) introduced in 2002, the Office of Management and Budget (OMB) developed a tool designated as the Program Assessment Rating Tool (PART). As the only standard tool applied government-wide, PART was designed to help examine a program's purpose and design, strategic planning, management, and the results achieved. PART has gained prominence in NOAA as a tool to help the program manager and the goal lead manage their programs more efficiently and effectively.

PART reviews help inform budget decisions and identify actions to improve results. Agencies are held accountable for implementing PART follow-up actions, also known as OMB Improvement Plans, for each of their programs that have been the subject of PART evaluations. The PART is central to the Administration's Budget and Performance Integration (BPI) Initiative within the PMA, because it drives a sustained focus on results. To earn a high PART rating, a program must use performance data to manage, justify its resource requests based on the performance it expects to achieve, and continually improve efficiency—all goals of the BPI Initiative.

NOAA has developed a methodology, found in the NOAA PART Manual, for programs to follow for PART assessment and reporting. This Manual explains the PART and provides guidelines for applying it to NOAA programs. NOAA's PART Manual can be found at NOAA's PPBS website under Performance Measures (www.ppbs.noaa.gov/PDFs/2007_PART_Consolidated_Final.pdf). The PART Manual is updated as necessary to stay current with OMB guidance.

4.2 SUPPORT SERVICES

NOAA's Support Services provides the critical policy, programmatic, and managerial foundation to support operations. These services involve the development and implementation of agency-wide

Support Services: Strategy, Policy, and Programmatic Management

- National Environmental Policy Act (NEPA)
- Program Management
- Project Management
- Communications
- Research
- Education
- International Affairs

Section Under Development

Legislative Affairs

policies, systems, and processes for management to ensure that government operations and external business partners comply with applicable laws and regulations and prescribe remedial action when noncompliance is identified.

A wide variety of activities are conducted within the sphere of Support Services. Programs are monitored and analyzed for internal and external effectiveness. Information is communicated with and between stakeholders, including the public, the executive branch, and Congress. Significant operational resources are

dedicated to tracking and influencing legislation that affects NOAA's mission. NOAA strives to educate the public about the work accomplished and the resulting societal benefits. These benefits are often the long-term result of work in Research and Development of new technologies, and in the transition of promising technologies to practical application.

4.2.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA), signed into law in 1970, establishes a national environmental policy and provides a framework for environmental policy and decision making by Federal agencies. NEPA directs Federal agencies, when planning projects or issuing permits, to conduct environmental reviews to consider the potential impacts on the human environment by their proposed actions. NEPA also established the Council on Environmental Quality (CEQ), which is charged with the administration of NEPA.

4.2.1.1 NEPA Assessments

The CEQ developed Regulations for Implementing the Provisions of NEPA (40 CFR 1500-1508). Under these regulations each agency is required to develop NEPA procedures to meet their agency's specific needs. The Department of Commerce's NEPA procedures are found in Department Administrative Order (DAO) 216-6. NOAA's NEPA procedures are found in NOAA Administrative Order (NAO) 216-6. NOAA staff should follow all of these regulations and procedures when conducting the NEPA process.

The NOAA NEPA Coordinator is the principal point of contact for NEPA-related issues within NOAA. Located in the Office of Program Planning and Integration, the NEPA Coordinator ensures NEPA compliance for NOAA and DOC, and acts as a liaison between NOAA, CEQ, and the Environmental Protection Agency (EPA). Supporting the NEPA Coordinator, the PPI NEPA staff 81

provides policy development, advice, and internal training. The PPI NEPA staff also provides advice to LOs on specific NEPA documents for submission.

When considering a major Federal action, NOAA must assess the impacts of that action on the human environment. This is completed through a categorical exclusion (CE), an environmental assessment (EA), or an environmental impact statement (EIS), depending on the level of significance of potential environmental impacts. The best- and worst-case scenarios for estimated time to complete each of these assessments is shown in Figure 4.2.1.1.1-1.

A CE applies if the proposed action falls within a category of actions that do not individually or cumulatively have a significant impact on the human environment. A CE is a brief memorandum to the administrative record documenting that the action qualifies for one of NOAA's CE categories. A CE may take 1 day to 1 week to prepare.

An EA is a concise document that briefly provides supporting reasons and analysis for determining whether to prepare a Finding of No Significant Impact (FONSI) or an EIS. An EA may take 2 weeks to 6 months or more to prepare, depending on issues associated with the proposed action.

An EIS is a detailed document assessing the environmental impacts of the proposed action and alternatives to the proposed action. An EIS may take 10 months to 2 years to prepare, depending on the issues associated with the proposed action.

The LO determines which document is appropriate for the issue, and prepares the CE, EA, or EIS. The LO project manager prepares or oversees the preparation of the NEPA document, or manages a contactor that has been hired to prepare the NEPA document. The responsible program manager (RPM) is responsible for the content and analysis in the document. The decision maker (generally the LO Assistant Administrator or SO Director) is ultimately responsible for making the decision regarding the action being analyzed. This person is responsible for the adequacy of the NEPA document and signs the FONSI for an EA, or Record of Decision for an EIS.

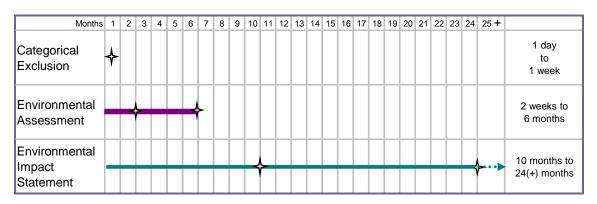


Figure 4.2.1.1-1 Estimated time to complete NEPA assessments

4.2.1.2 NEPA Roles and Responsibilities:

Office of Program Planning and Integration (PPI) NOAA NEPA Coordinator

- Ensures NEPA compliance within NOAA, and provides final clearance for all EAs and EISs
- Ensures NEPA compliance for NOAA and DOC
- Advises NOAA staff on NEPA compliance
- Develops NOAA NEPA policies and training
- Acts as a liaison between NOAA, CEQ, and the EPA
- * Advises, assists, and reviews draft EAs and EISs

The Proponent is the Line/Staff office or program proposing the action.

The Line Office/Staff Office determines and prepares the CE, EA, or EIS. Within the LO/SO, the Decision Maker (generally the LO Assistant Administrator or SO Director who has either direct or delegated statutory authority for making a decision):

- Makes the decision regarding the action for which the analysis is prepared and verifies the adequacy of the NEPA documentation.
- Designates an RPM for each relevant action and coordinates between the RPM and the NOAA NEPA Coordinator.
- Signs the FONSI for an EA or Record of Decision for an EIS.

The Project Manager prepares or manages the NEPA analysis and documentation or manages a contractor who prepares the analysis.

The Responsible Program Manager (RPM) is responsible for the content and analyses in the document. The NOAA RPM is typically a Regional Administrator, a Science Center Director, a Laboratory Director, or a Program Director within an LO, SO, or Program Office.

4.2.1.3 Additional Resources

More information on NEPA is available at the NOAA NEPA public website: www.nepa.noaa.gov. This site provides general information on NEPA compliance. NOAA staff can also access the NOAA NEPA Intranet site at www.intranet.nepa.noaa.gov. This site provides NOAA staff with specific NOAA NEPA information, including NOAA guidance documents, templates, and examples. The NOAA NEPA handbook provides detailed information on the NOAA NEPA process and how to prepare a CE, EA, and EIS. The handbook is available at www.nepa.noaa.gov/NEPA HANDBOOK.pdf.

4.2.2 PROGRAM MANAGEMENT

A program is a focused set of activities and/or project(s) managed in a coordinated way to obtain benefits not available from managing them individually and is designed to achieve a specific outcome(s) of the NOAA Strategic Plan goals. NOAA is a complex organization and requires an effective management structure that is both solution-oriented and adaptive. NOAA satisfies validated mission requirements outlined in the strategic goals through the Line/Staff Offices (LO/SO) via programs.

Program management offers NOAA an organizational structure that supports NOAA's missions by leveraging cross-office strengths and standardizing processes. Policies and procedures continue to be developed for managing NOAA's programs. For more information on NOAA's programs visit www.ppi.noaa.gov or contact the Program Planning and Integration Office.

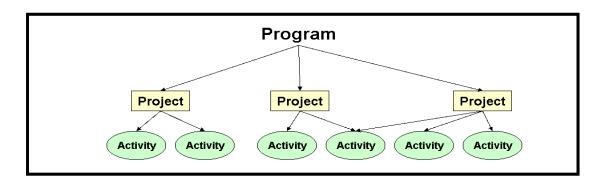
Program Management versus Project Management

The terms "program management" and "project management" are often used interchangeably. However, there are important distinctions between programs and projects.

The Project Management Institute's Project Management Body of Knowledge (PMBOK) provides the following descriptions:

- Program management is the centralized, coordinated management of a group of projects to achieve the program's strategic objects and benefits.
- Project management is the management of a temporary endeavor undertaken to create a unique product, service or result.

Program management is the function of managing many diverse components (projects, ongoing operations and services). Project management is the function of managing multiple activities.



4.2.2.1 Establishing a New NOAA Program

New programs are established in NOAA through the Executive Decision Process. The following principles are considered in the formation of new NOAA programs.

Principle	Explanation		
Programs must have requirements drivers	To be effective programs need to have a defined government role or problem that needs to be solved by the government rather than the private sector. Requirements drivers establish the clear NOAA responsibility. A NOAA driver is specified as legislation, regulation, Executive Order, policy decision, interagency or international agreement, or other official action that establishes a NOAA responsibility. The requirements drivers establish clear program boundaries and authorities for the program manager. Requirement drivers are documented in the program charter.		
Programs are enduring in nature	Programs are distinguished from projects by the nature of their requirements drivers, which typically define the role of the Federal government for a specific issue. By definition projects are temporary in nature — having a beginning and end. Projects must achieve objectives within cost, on schedule and deliver a product or service at a desired level of performance. Programs span many years and are characterized more by their public benefit or outcome than by a specific product or service.		
Programs have goals, objectives, and outcomes that directly relate to the NOAA Strategic Plan	Because programs are characterized by their public benefit or outcome they will have a direct relationship to the NOAA Strategic Plan through the strategic goals. Programs can include one or more subprograms or projects.		
Programs should have a specific designation of funding	Programs are more likely than projects to have a specific designation of funds, whereas projects are normally initiated by administrative or managerial actions. The specific designation of funding allows the program to appropriately plan and execute assigned responsibilities over an extended period.		

The establishment of a new NOAA program or modifications to an existing program will typically follow the following steps.

Proposal	Analysis	Decision	Post Decision
The proposal to create a new program or modify an existing program is initiated by • existing programs in the Program Realignment Section of the Program Operating Plan • Goals in the Strategic Portfolio Analysis • PA&E during Programming • NOAA Senior Management through the Executive Decision Process	The merits of creating a new program or modify an existing program for NOAA must be analyzed in terms of the principles stated above and other relevant factors. Depending on how the proposal was created the analysis will take different forms. PPI, PA&E, and the Budget Office, in conjunction with the affected LOs/SOs, will participate in the analysis of whether to create a new program or modify an existing program.	The decision to create a new program or modify an existing program will be documented in the Annual Program Decision Memorandum and/or through the Executive Decision Process. The new or modified program must also be assigned to a NOAA Strategic Goal and this may also require a separate action in the Executive Decision Process.	Once NOAA Senior Management has decided to create the new program or modify an existing program the following actions are required: — appoint (if required) a program manager working with PPI, establish or update a program charter working with NBO and PA&E, determine assigned budget formulation codes/PPAs establish or update program capabilities prepare or update a Program Operating Plan and participate in all of the PPBES phases

4.2.2.2 Matrix Programs

NOAA uses matrix program management to accomplish its goals and objectives on programs that require integration across LOs and Goal Teams, as shown in Figure 4.2.2.2-1. Matrix program management enables the program to optimize workforce expertise, specialized knowledge, tools, and instrumentation across Line Offices. Matrix programs work best when policies and procedures are standardized across the organization. Exchange of information and expertise reinforces standardization of NOAA

corporate culture, and cultivates new ideas, technology development, and management innovations.

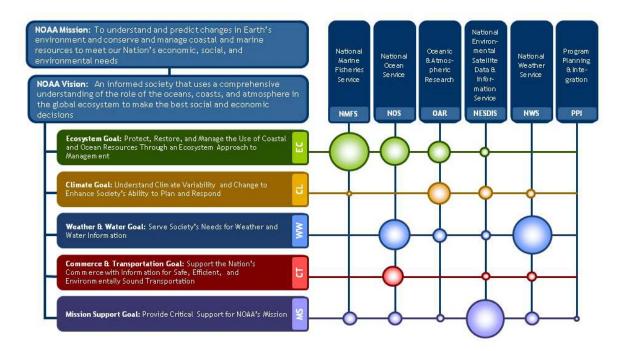


Figure 4.2.2.2-1 Matrix Program Management optimizes resources across the organization

Participants in the matrix organization include key individuals and their supervisors, a senior management team, and thematic working groups that provide expertise in planning, programming, and issue resolution.

The collaboration of management and technical expertise involved in establishing a matrix program charter ensures that the nature of the program—including the scope, benefits, stakeholders, and outputs—are understood so that objective decisions may be made concerning the resources required and the societal benefits expected.

4.2.2.3 Program Managers

Program managers (including matrix program managers) provide leadership and coordination across the program to ensure program plans and activities are consistent with the goals of the NOAA Strategic Plan. Section 0.1 below provides information on the appointment of program managers.

Program manager responsibilities (including matrix managers)

- Formulate the Program Charter
- Assist in the update of the NOAA Strategic Plan

- Communicate and coordinate with leadership and other NOAA offices participating in program activities
- Execute assigned responsibilities and report program performance through the Annual Operating Plan and evaluate program effectiveness
- * Represent program on Goal Team/Sub-Goal Team, and to higher authorities as needed
- Assists Goal Team/Sub-Goal Team in the Strategic Portfolio Analysis and program plan development
- Develop and maintain budget plan consistent with NOAA budget plans during the formulation phase. Coordinate any needed changes with the LO/SO budget office and the Goal Lead/Sub-Goal Lead
- Assist Goal Team/Sub-Goal Team in coordinating Capital Planning and Investment Control (CPIC) management and reporting process

Additionally, the matrix program manager reports to the Assistant Administrator for PPI and the LO supervisor, who both oversee the program effort to ensure the outcomes are achieved. In addition, PPI ensures that the efforts of each program are integrated and effectively draw from all applicable LO resources. Personnel for each program are drawn from various LOs to accomplish a specific outcome.

More information can be found at www.ppbs.noaa.gov/PDFs/Roles_&_Responsibilities.pdf. and by contacting PPI.

4.2.2.3.1 Appointing NOAA Program Managers

The following provides procedures for appointing and replacing NOAA program managers, including matrix program managers.

Criteria

Eligibility: Nominees must be a minimum of a GS-14 or equivalent and have leadership qualifications and subject area competencies.

Qualifications: Program managers must meet the list of general qualifications (see below) and have program-specific technical qualifications. In collaboration with the Office of Program Planning and Integration (PPI), the Goal/Sub-Goal Team Lead will generate a list of technical qualifications to be used in conjunction with the general qualifications.

General Qualifications

Program or project planning - including requirements management; project/task analysis and tracking; management of cost, schedule, and performance; risk assessment; and trade-off analysis.

Written and oral communication skills - including presentation of complex information in a straightforward manner in seminars, briefings, etc., and written papers and briefs.

Teambuilding – including an ability to bring disparate people together to achieve common goals and objectives, and demonstrated use of negotiation skills.

Non-Matrix Program Managers: After consultation with the Goal/Sub-Goal Team Lead, the Line Office (LO)/Staff Office (SO) sponsoring the program will formally appoint the program manager. Upon notification, PPI will update material and provide notification as described below.

Matrix Program Managers: The list of technical qualifications shall be reviewed and approved by the Deputy Assistant Administrators (DAAs) of participating LOs/Directors of participating SOs.

LOs/SOs participating in the program may nominate individuals for a program manager position by forwarding a resume addressing the technical and general qualifications to PPI, with a copy to the Goal/Sub-Goal Team Lead.

A panel consisting of the DAAs of the participating LOs/Directors of the participating SOs, the DAA of PPI, and the Goal/Sub-Goal Team Lead may review the qualifications of each nominee. Interviews of the nominees may be conducted if the majority of the panel believes it is necessary. The panel shall strive to reach a consensus recommendation for the Assistant Administrator (AA) of PPI. If consensus cannot be reached, the AA of PPI shall review the nominees as well as the majority and minority views of the panel. The AA of PPI shall strive to reach consensus with the panel. If this is not possible, the AA of PPI shall forward a recommendation to the Deputy Under Secretary (DUS) with the panel views. The DUS shall approve the appointment of the matrix program manager. Upon notification, PPI will update material and provide notification as described below and the appropriate LO will update the performance plan to reflect the new responsibilities. Sample performance elements for program managers are included below.

Appointing Acting Program Managers: When an incumbent program manager needs to be replaced, and a replacement program manager is not appointed, an acting program manager will be appointed. The acting program manager will be responsible for the duties of the program manager from the time he/she is appointed until a permanent program manager is appointed and assumes the role.

4.2.2.3.2 Performance Elements for NOAA Program Managers

Objective Statement: Provide leadership and coordination across the program to ensure documents and activities are developed in accordance with LO/SO, Goal Lead, and PPBES guidance. This includes:

	Lead		Coordinate		Report
*	Form and lead a team to ensure coordination across participating NOAA offices in program activities.	*	Establish communication and coordination mechanisms to keep team members and leadership apprised of program activities/issues.	*	Develop, coordinate, report, and update a program Annual Operating Plan with the program members.
*	Seek to resolve conflicts in the program at the lowest possible level. Raise unresolved conflicts through the chain of command. Conduct all responsibilities outlined in PPBES including annual assessment of program execution and performance.	*	Serve as an active member of the Goal/Sub-Goal team and assist in Goal/Sub-Goal Assessment and development of the Goal/Sub-Goal Program Plan. Develop and maintain a budget plan consistent with NOAA budget plans during the formulation phase. Coordinate any needed changes with the LO/SO budget office and the Goal/Sub-Goal Team Lead. Represent the program on	*	Submit the annual operating plan through the chain of command for approval. Represent the program execution and performance to higher management authorities when requested.
		*	the Goal/Sub-Goal team to ensure program plans are aligned with Goal/Sub- Goal objectives.		

4.2.3 PROJECT MANAGEMENT

Fundamental project management principles provide a framework for successful project execution:

- Project Management accountability
- Sound disciplined up-front planning
- Development and implementation of sound acquisition strategies to meet requirements
- Well-defined and managed performance baselines

Project management is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives. A project is a finite endeavor - having specific start and completion dates. A project is undertaken to create a unique product or service which brings about beneficial change or added value. This finite characteristic of projects stands in sharp contrast to processes, or operations, which are permanent or semi-permanent functional work to repetitively produce the same product or service.

4.2.3.1 Major Projects

To ensure the appropriate level of senior level management oversight for significant projects, NOAA has established criteria to separate those projects which are considered major investments. Major Projects in NOAA are defined as any project with life cycle costs greater than the NOAA-established threshold of \$250 million (FY 2005 constant dollars), or otherwise directed by DOC or higher authority. The life cycle cost determination should be computed over the service life for physical assets and over 10 years for other projects.

Five criteria were developed to distinguish which NOAA projects qualify for the distinction of Major and therefore require direct senior level oversight. These criteria are:

Selection Criteria	Explanation
High development, operating or maintenance costs: acquisitions with life cycle costs that meet thresholds included in NAO 216-108 (\$250M in FY 05\$)	While all projects require some level of oversight, the intent is to provide senior level input to those projects that have major fiscal impact.
High/broad scope of impact to agency's mission	Projects that are broad in scope are by nature high risk due to the organizational interaction and coordination required to maintain cost, schedule and performance. Projects that do not have a high/broad scope of impact to agency's mission can be effectively monitored at the individual Line/Staff Office or program level.
High fiscal and management risk	High risk projects require the active engagement of senior managers in order to resolve identified risks

	and maintain cost, schedule and performance objectives. Projects that do not have high fiscal and management risk can be effectively monitored at the Line office or program level.
Unique product, service or result - not a bundling of efforts	It is difficult, if not impossible, to track all of the permutations of a bundled effort. Bundled efforts tend to be program efforts rather than a specific project.
New acquisition starts vice current and ongoing levels of effort	The intent is to track efforts that have a defined beginning and end, not those that are operational in nature and continuously provide NOAA products and services.

The Deputy Under Secretary may also designate any project as a major project regardless of its life cycle costs or criteria.

Contact the Program Analysis and Evaluation Office for more information on the management of NOAA's Major Projects.

4.2.3.2 OMB 300's

The Office of Management and Budget (OMB) requires the completion of an Exhibit 300 to facilitate the collection of information for Congress and to ensure the business case for investments are made and tied to the mission statements, long-term goals and objectives, and annual performance plans are developed pursuant to the GPRA. In general an Exhibit 300 must be submitted for all Major Projects as defined by NAO 216-111 with the official budget request.

NOAA's capital investments are managed using the Capital Planning and Investment Control (CPIC) Process. Capital assets include

- Office buildings, hospitals, laboratories, schools, and prisons;
- Dams, power plants, and water resources projects;
- Motor vehicles, airplanes, and ships;
- Satellites and space exploration equipment;
- Information technology hardware, software and modifications;
- Department of Defense (DOD) weapons systems; and
- Environmental restoration (decontamination and decommissioning efforts).

In support of the internal PPBES process, Exhibit 300 business case documents should be drafted for all capital investments above \$500K during the Planning phase as a supporting attachment to the Program Operating Plan (POP). Prior to initiating an Exhibit 300 interested parties should coordinate with the appropriate program manager and corresponding Office of Primary Responsibility to assess the need to build upon existing documents or generate a new draft business case. The chart below provides more specifics on project Exhibit 300 Points of Contact in NOAA.

Project Type	Criteria for Drafting an OMB 300	Office of Primary Responsibility	Review Board	Point Of Contact
Information Technology (IT)	Any new IT project	Chief Information Officer	NOAA IT Review Board and Commerce IT Review Board	CIO Director of Planning, Policy and Analysis
Facilities	Above DOC approval threshold for estimated construction cost (FY08 \$2.59M). See DOC Real Property Manual for details.	Chief Administrative Officer	Chief Financial Officer (CFO) and NOAA Facilities Investment Management Board (FIMB)	Facilities Program Manager
Fleet	Per OMB major investment criteria (see note below)	Office of Marine and Aviation Operations	Fleet Council	Fleet Sub-Goal Lead
Satellite	Per OMB major investment criteria (see note below)	National Environmental Satellite, Data and Information Service	Program Management Council	NESDIS CFO

NOTE: OMB defines a Major Investment as a system or acquisition requiring special management attention because of its importance to the mission or function of the agency, a component of the agency or another organization; is for financial management and obligates more than \$500K annually; has significant program or policy implications; has high executive visibility; has high development, operating, or maintenance costs; is funded through other than direct appropriations; or is defined as major by the agency's capital planning and investment control process.

In addition, the NOAA CFO can require or waive the Exhibit 300 as part of the NOAA Budget phase if it determines the definition of an OMB major investment has been met. More information on the Exhibit 300 can be found at the OMB website www.whitehouse.gov/omb/circulars/a11/current_year/s300.pdf.

4.2.3.3 Monitoring Major Projects

Major projects are monitored thorough their life cycle by establishing Key Decision Points (KDP). The requirement for KDPs for Major Projects is documented in the Requirements Management NAO 216-108. A KDP is a significant milestone in the project life cycle and results in an agency investment decision. In general the KDPs are as follows (for systems acquisitions, NOAA and Department Administrative Orders (NAOs/DAOs) may provide different and more specific requirements or definitions):

- KDP-1--Needs Identification and Definition: identification and definition of shortfalls, and the general magnitude of life cycle costs that may be needed to address them.
- KDP-2--Solution Alternatives Identification: selection of one or more alternatives to be advanced for further analysis (including research and pilot testing).
- KDP-3--Solution Selection: selection of an approach, including project scope, review procedures, and commitment as appropriate to full-scale research and development.
- KDP-4--Acquisition/Implementation Approval: commitment to full acquisition and/or operational implementation with explicit approval of baseline objectives and project scope to include life cycle cost, schedule, and performance goals.

NOAA delegates the monitoring of major projects to Councils. NOAA's current list of major projects can be found at https://www.ppbs.noaa.gov/Requirement_Management.html

4.2.3.4 Appointing NOAA Major Project Managers

Project Managers are responsible for the managing the life-cycle of a project to meet requirements. One of the principal outcomes in exercising this responsibility is the delivery of projects on schedule, within budget, and with the required performance capability. All major projects will have an assigned project manager. The project manager is responsible for translating mission requirements into a set project milestones and deliverables to ensure a satisfactory solution is delivered. The project manager establishes and maintains a process to manage change throughout the project's life cycle. The project manager is responsible for preparing documentation to support the continuous and systematic review of progress as it relates to Key Decision Points (KDPs) and meeting mission requirements. The requirements for appointing and replacing NOAA Major Project Managers are:

- Eligibility: Nominees must be a minimum of a GS-14 or equivalent and have leadership qualifications and subject area competencies.
- Qualifications: Project managers must meet the list of general qualifications (see below) and have project-specific technical qualifications. In collaboration with the Office of Program Planning and Integration (PPI), the Goal/Sub-Goal Team Lead will generate a list of technical qualifications to be used in conjunction with the general qualifications.

A good Major Project Manager candidate will have the capability to coordinate and communicate program content with the NOAA senior leadership, provide overall integration, oversight, and

assistance to the program's constituent projects, and effectively manage the successful accomplishment of a program that meets the requirements of the customer.

4.2.3.4.1 Major Project Manager Training Requirements

The Office of Management and Budget (OMB) released a memorandum on the Federal Acquisition Certification for Program and Project Managers (FAC-P/PM) {www.whitehouse.gov/omb/procurement/workforce/fed_acq_cert_042507.pdf}. The FAC-P/PM focuses on essential competencies needed for program and project managers; the program does not include functional or technical competencies, such as those for information technology, or agency-specific competencies. This certification is required for project managers that are assigned to major acquisitions as defined in Office of Management and Budget (OMB) Circular A-11, Part 7, Exhibit 300, Planning, Budgeting, Acquisition, and Management of Capital Assets. The target completion date for this certification is one year from the date of assignment to the program or project. Project Managers assigned to programs considered major acquisitions should be senior-level certified or granted a waiver from their Line/Staff Office. Line/Staff Offices can consider the competencies and experience of the project manager along with associated training. OMB recommends that a interactive training be completed that encompasses strategic thinking, vision, and external awareness.

4.2.4 COMMUNICATIONS OFFICE

The Office of Communications provides advice to the Office of the Under Secretary, Assistant Administrators, and program/Staff Office Directors and their staff on media and constituent relations. The office consists of three elements: Media Relations, External Affairs, and headquarters services.

The NOAA Office of Communications is committed to taking a strategic approach to communications, and informing the American public of NOAA initiatives—that address critical issues. With a suite of professional services, the office practices integrated communications. NOAA Communications goals are to increase name recognition for the agency, interact with stakeholders and direct users of our products and services, and help advance key legislation and budget initiatives.

As a corporate function reporting to the Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator, the Office of Communications interacts with all agency Line and staff offices to deliver public information. The organization provides media relations, constituent services, graphic and publication support services, a national exhibits program, internal communications, and manages the award-winning NOAA.gov Web site. The Office of Communications offers strategic communications planning and guidance to NOAA senior leadership as well as all agency line offices, regional teams, and programs.

Within the Media Relations section of the Office, there are about 50 public affairs specialists located in 12 offices throughout the country. Media relations staff work with NOAA line offices to generate news coverage and plan national and regional events in the field. The External Affairs staff within the Communications Office reaches out to non-governmental organizations (NGOs), state and local governmental entities, academia, trade associations and the general public. The Headquarters Office of Communications function manages the NOAA Web site, the NOAA World online employee site, publications clearance, multi-line office events and special projects.

The NOAA Office of Communications reaches a collective audience of approximately 6 million annually with almost 3 million visits to the Web site, an average of 300 press releases issued per year, exhibits at about 20 national events, stakeholder meetings and round table discussions, and almost a half dozen major press conferences each year.

For more information go to www.noaa.gov/media

4.2.5 RESEARCH IN NOAA

Preeminent research underpins NOAA's ability to provide accurate weather forecasts, to protect and manage the nation's coastal and ocean resources, and to enable society to plan for and respond to climate change. NOAA is committed to conducting and sponsoring preeminent research, providing maximum value to society, all within a culture of transparency. Research in NOAA is conducted across the Lines and Goals by Federal Laboratories and through partnerships with universities, the private sector and science institutes across the country.

Research in NOAA is the foundation for an innovative and productive society and supports NOAA's mission to meet the nation's economic, social and environmental needs. As such, NOAA established the NOAA Research Council to ensure the agency's research activities are of the highest quality, meet long-range societal needs, take advantage of emerging scientific and technological opportunities, and shape a forward-looking research agenda.

4.2.5.1 Strategic Planning for Research in NOAA

In 2005, the NOAA Research Council also produced a 20-Year "Research Vision" to provide overarching direction for the agency's research in view of the environmental challenges likely to face the nation in the decades ahead. The vision document recognized NOAA's fundamental role in supporting policy and decision makers to address these challenges.

In 2008, the Research Council released its agency-wide research plan for fiscal years 2008-2012. The plan defines an interdisciplinary, coordinated, cross-program approach to integrate research activities across the agency. The Plan frames NOAA's research in the context of *societal needs*, encourages innovation through *transformational research*, and identifies specific research *milestones and objectives* to reach our goals.

NOAA has also adopted a Transition of Research to Application Policy and implementation procedures, which have established a consistent process within NOAA for identifying mature research and for accelerating the rate at which this research transitions into applications.

4.2.5.2 Research Council Structure

Research across NOAA is guided by the NOAA Research Council. The Council provides corporate oversight and develops policy to ensure that NOAA research activities are of the highest scientific quality, meet longrange societal needs, take advantage of emerging scientific and technological opportunities, shape a forward-looking research agenda, and are accomplished in an efficient and cost effective manner. NOAA Research Council (www.nrc.noaa.gov):

Research Council Mission

The Mission of the NOAA Research Council is to ensure that all NOAA services are based on sound science and that all NOAA research programs and long term plans are consistent with the NOAA Mission, NOAA Strategic Plan and recommendations contained in National Research Council and NOAA Science Advisory Board (SAB) research reviews.

The Research Council is composed of voting members from each of the NOAA Lines and Goals, a Chair and a Vice Chair, and three ex- officio members who chair the Council's standing advisory Committees. The Chair is currently held by the Office of Oceanic and Atmospheric Research.

Committee for Monitoring Research:

A standing committee, the Committee for Monitoring Research, was established by the NOAA Research Council in July 2007. The Committee assists the Council in accomplishing its oversight role for monitoring and evaluation of research performance within NOAA to ensure quality, relevance and value of NOAA's research. Among the outcomes of a well-designed monitoring approach is a balanced investment of resources across the R&D portfolio and the ability to communicate compelling evidence to stakeholders, DOC, OMB and Congress of the benefits of NOAA's research to society. The role of the committee is to conduct investigations and analyses that inform and guide the Research Council in the establishment of:

- Standard reporting of existing and development of new performance measures for research;
- A monitoring strategy for tracking funding and performance; and
- Consistent and transparent evaluation practices.

Cooperative Institutes Committee (www.nrc.noaa.gov/ci/):

NOAA Administrative Order 216-107 (effective September 2005) established a new NOAA policy on Cooperative Institutes (CIs) and created the Standing Committee on CIs to ensure compliance with the new policy and, when requested, to provide information to assist the Research Council with general CI program oversight.

Social Sciences Committee:

Established in February 2007, the Social Science Committee is a standing advisory Committee to the NOAA Research Council designed to strengthen, coordinate, and integrate the agency's social science research and analysis capabilities.

4.2.5.3 Cooperative Institutes

NOAA's Cooperative Institutes are academic institutions that collaborate in a large portion of NOAA's research and play a vital role in broadening NOAA's ability to provide the expanding array of environmental assessment and predictions required to address the nation's forecasting needs

Because many Cooperative Institutes are collocated with NOAA research laboratories, there is a strong, long-term collaboration between scientists in the laboratories and in the university. Cooperative Institutes not collocated with a NOAA laboratory often serve diverse research communities and research programs throughout NOAA.

Cooperative Institutes serve an additional important function: they help educate and train the next generation of NOAA's and the nation's scientific workforce. Many of the cooperative agreements 98

between NOAA and our academic partners provide for formal NOAA sponsorship of students through fellowships.

4.2.5.4 NOAA Definition of Research and Development

The NOAA Executive Council approved the use of the National Science Foundation definitions for Research and Development in NOAA on January 13, 2004.

Research, development, demonstration activities, and R&D plant include all direct, incidental, or related costs resulting from, or necessary to, performance of research and development, and costs of R&D plant as defined below, regardless of whether the research and development are performed by a Federal agency (intramurally) or performed by public or private individuals and organizations under grant or contract (extramurally). Research and development exclude routine product testing, quality control, mapping and surveys, collection of general-purpose statistics, experimental production, and the training of scientific personnel.

Research is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objectives of the sponsoring agency.

In **basic research** the objective of the sponsoring agency is to gain fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind.

In **applied research** the objective of the sponsoring agency is to gain knowledge or understanding necessary for determining the means by which a recognized and specific need may be met.

Development is systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes. It excludes quality control, routine product testing, and production.

Demonstration activities that are part of research or development (i.e., that are intended to prove or to test whether a technology or method does, in fact, work) should be included. Demonstrations intended primarily to make information available about new technologies or methods should not be included.

R&D plant (R&D facilities and fixed equipment, such as reactors, wind tunnels, and particle accelerators) includes acquisition of, construction of, major repairs to, or alterations in structures, works, equipment, facilities, or land for use in R&D activities at Federal or non-Federal installations. Excluded from the R&D plant category are expendable or movable equipment (e.g., spectrometers, microscopes) and office furniture and equipment. Also excluded are the costs of pre-design studies (e.g., those undertaken before commitment to a specific facility). These excluded costs should be reported under total conduct of research and development. Obligations for foreign R&D plant are limited to Federal funds for facilities located abroad and used in support of foreign research and development.

4.2.5.5 Research Offices and Programs in NOAA

The NOAA research infrastructure includes a system of Federal laboratories and science centers and ship, aircraft, and other observing systems and platforms. This infrastructure is enhanced though assets provided by our external partners. For a list of NOAA's labs and cooperative institutes, please see Chapter 11 of the NOAA 5 Year Research Plan (www.nrc.noaa.gov/plans_docs/5yrp_2008_2012_final.pdf).

4.2.5.6 Principles of Research and Development in NOAA

In 2008, the Council began development of a set of Principles of Research and Development to codify the basic tenets of research in NOAA. The Council is planning to issue these principles in 2009.

4.2.5.7 Additional Information

- 20-Year Research Vision: http://nrc.noaa.gov/plans docs/new noaa.pdf
- 5-Year Research Plan (FY 20082012): http://gra.goog.gov/plans.doog/Furn.2008.6
 - 2012): http://nrc.noaa.gov/plans_docs/5yrp_2008_2012_final.pdf
- 5 Year Objectives and Milestones by Goal for 2008 2012: http://nrc.noaa.gov/plans_docs/Milestones_by_Goal_FINAL_2008.pdf
- Office of Oceanic and Atmospheric Research Laboratories and programs:
- Air Resources Laboratory: www.arl.noaa.gov/
- Atlantic Oceanographic and Meteorological Laboratory: www.aoml.noaa.gov/
- Earth System Research Laboratory: www.esrl.noaa.gov/
- Geophysical Fluid Dynamics Laboratory: www.gfdl.gov/
- Great Lakes Environmental Research Laboratory: www.glerl.noaa.gov/
- National Severe Storms Laboratory: www.nssl.noaa.gov/
- Pacific Marine Environmental Laboratory: www.nssl.noaa.gov/
- Climate Program (<u>www.cpo.noaa.gov/</u>)
- Sea Grant Program (<u>www.seagrant.noaa.gov/</u>)
- Ocean Exploration and Research Program (www.oar.noaa.gov/oceans/t exploration.html)
- Office of Weather and Air Quality Research (<u>www.research.noaa.gov/weather/</u>)

4.2.5.8. Transition of Research to Application

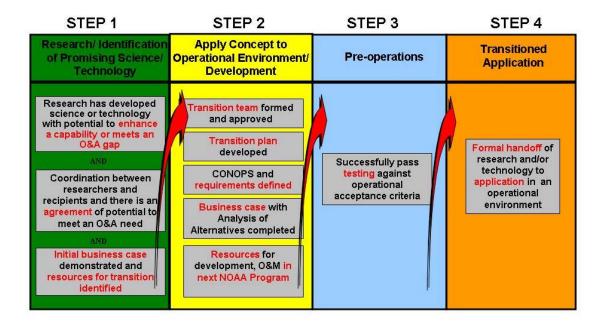
NOAA is faced with the challenge of reducing impediments that limit the efficient transfer of research findings into products and services for our stakeholders. NOAA is committed to maximizing the value of our research and ensuring the successful transition of research to application. Ensuring successful transitions will allow NOAA to provide the best, most up to date information and services to our

NOAA Transition of Research

- Policy on Transition of Research to Application (NAO-216-105)
- Transition Implementation Procedures
- Integration of the transition of research to application in NOAA's PPBES

stakeholders. Significant steps have been taken to ensure that the transition of research to application is streamlined and consistent. NOAA has adopted a policy on Transition of Research to Application (NAO-216-105) which was issued to accelerate transition to application of both internal and external research. Additionally, to promote flexibility in achieving efficient and effective transition, NOAA issued an Implementation Procedures which provide a generic framework of transition activities and Checkpoints.

The transition Implementation Procedures describe a four step transition process for all research transitioning to the NOAA enterprise. The figure below depicts the NOAA four step transition process. While additional steps and Checkpoints may be necessary in the transition process, the four steps outlined below are the minimum required for successful research to application transition



Throughout the transition process, management must review transition projects and ensure project deliverables continue to meet valid NOAA mission requirements, as defined in the NOAA Administrative Order 216-108 defining NOAA requirements management policy. Additionally, within the transition process there are three Checkpoint reviews. These Checkpoints are formal decision points that establish approval to continue with and move to the next step in the transition process. Ultimate responsibility for Checkpoint reviews rests with the Line Offices (Los) and their Transition Managers.

NOAA's Planning, Programming, Budgeting, and Execution System (PPBES) provides the programmatic and budgetary framework for identifying and executing transition projects. During the Planning phase, transition projects are identified in Program Operating Plans (POPs). In the Programming phase, transitions are identified in the program plans and LO Integrated Priority Lists. During the Budget phase, transition funds are accounted for. And most importantly, during the Execution phase, actions are taken to move transition forward into applications.

4.2.5.8.1 Transition Roles and Responsibilities

Outlined below are the roles and responsibilities for those accountable for ensuring research is successfully transitioned to application. Also identified are entities that have the authority for designating the project managers and transition teams responsible for developing and executing the transitions.

The Under Secretary of Commerce for Oceans and Atmosphere (NOAA Administrator), the Assistant Secretary, and the Deputy Under Secretary shall provide top management support for implementation of this policy and the development and implementation of associated procedures.

The Assistant Administrator, Office of Program Planning and Integration, the Director, Program Analysis and Evaluation, and the NOAA Chief Financial Officer are responsible for issuing guidance for the Planning, Programming, and Budget phases of PPBES, respectively, in support of this Order.

Line Office Assistant Administrators and the Director, NOAA Office of Marine and Aviation Operations: Are responsible for promoting the goals and implementing the requirements of this policy; approving Transition Plans; providing staff support for the appropriate Transition Teams; providing oversight for all projects in their Line Office; ensuring a Line Office quarterly transition project review is conducted; approving final decisions regarding the transition of research results; and reporting on the execution status of transition projects per instructions provided by the Deputy Under Secretary for Oceans and Atmosphere.

Line Office Transition Managers are responsible for the following: Managing the Line Office transition portfolio; fostering applicable Line Office transition projects through PPBES; tracking and providing timely reports to Line Office leadership on the status of the portfolio; ensuring the development of appropriate Transition Plans; and coordinating with other Line Office(s) Transition Managers, Program Managers, and Goal Teams when appropriate.

Transition Project Leads are responsible for the following: Managing the transition project and all associated activities; leading the transition team; working with the Line Office Transition Managers to foster their transition projects through the PPBES processes; and ensuring the development of appropriate Transition Plan.

Transition Teams will include representatives from the research and applications communities and are responsible for the following: Preparing Transition Plans; Conducting transition activities; and identifying, reporting, and responding to significant deviations in the execution of the Transition Plan.

Mission Goal and Sub-goal Leads are responsible for the following: Identifying and planning for transition of research results with appropriate Program Managers and Transition Leads; working with Line Office management, specifically Line Office Transition Managers, to ensure Transition Plans for projects within their Goal are developed; seeking relevant external research results and projects in conjunction with Program Managers and the NOAA Research Council; and coordinating activities between research and operational programs as needed.

Program Managers for programs including research are responsible for the following: Proposing and planning for priority research projects; identifying and planning for transition of research results into applications; and developing research responsive to agency mission requirements: (1) through understanding and anticipating user needs; (2) through maintaining cognizance of operational procedures and practices; (3) through exploring relevant new and emerging science and technology internal and external to NOAA; and (4) through supporting peer reviewed science.

Program Managers for programs including operational and other regulatory activities are responsible for the following: planning for the transition of research results; understanding and meeting user needs; identifying operational requirements; maintaining cognizance of on-going research projects and results; fostering opportunities for new research including introducing new operational practices or procedures; and establishing and maintaining dialogue with researchers.

The NOAA Research Council is responsible for the following: Participating in the PPBES process and providing comments regarding the research portfolio which includes identifying the readiness of research results to transfer and the relative priority of these projects; overseeing NOAA activities to identify applicable external research results; and ensuring the NOAA 5-year Research Plan identifies and plans for research results, in that timeframe, estimated to be transitioned to applications.

Other applicable Councils are responsible for participating in the PPBES process and providing comments regarding the identification and readiness of projects for transfer and the relative priority of these projects.

4.2.5.8.2 Transition Lessons Learned

Those involved in transitioning mature research to applications should keep in mind the following transition lessons learned.



Adequate funds are needed for successful transitions:

Transitions are not budget neutral and thus they must be adequately funded. Resources need to be identified and committed early in the transition process. The Transition Board has taken the initial steps needed to integrate transitions in the PPBES process. Transition resources associated with the 45 projects were highlighted in the FY 2009 Planning and Programming phase. The Board will provide oversight through the FY 2010 Planning and Programming process.



Accountability for results and independent oversight are required for success:

Appropriate oversight and accountability is needed at the start of a transition. Ideally, the oversight should be from an entity independent of the project, cognizant of the science or technology being transitioned, and able to direct resources to ensure the project's success. Accountability ultimately rests with the Line Office(s) involved in the transition project. The Transition Board has established a transition process and has provided limited oversight but is not staffed or positioned to provide the full oversight required.



Successful transitions are planned early:

The transition timeline is long, thus transition should be considered when a research concept shows promise to improve NOAA's mission. The Transition Board has integrated transition into the PPBES and thus going forward, transitions should be planned at least 5 years in advance. However, it is important that mature research is identified early in the process. In the past this identification has been done in a bottom up manner through program managers. PPI will be working with the Research Council to provide a top down identification of mature research.



Successful transitions recognize and appreciate research and operational cultures:

Researchers and Operational organizations have differing perspectives and cultures. In some cases, the research community is concerned that transition may result in quality degradation of a product once it goes operational and/or fearful of a loss of resources. In some cases, the operational community is concerned about the capacity to assimilate research in the operational environment and/or skeptical of the reliability of the capability. These cultural issues must be recognized and worked throughout the transition. Co-location of the researchers and operations communities has helped to alleviate some of these cultural differences. If those involved in the transition are not co-located it is essential that both organizations establish early and routine communications. Joint round tables and workshops could be used to foster communication.



Transition emphasis should be placed on improving NOAA's core products and services:

NOAA must appreciate that not all mature research will be transitioned into applications. Research and operational success should not be defined by the quantity of transitions. Rather success should be defined by the cumulative impacts of NOAA's research on the operational environments and the organization's delivery of superior products and services.

4.2.6 EDUCATION

The Office of Education's (OEd) mission is improve the public's understanding and appreciation of NOAA science, and of the natural environment and resources the Agency is charged to protect resulting in an educated constituency that can make informed decisions and take appropriate actions. In August 2007, Congress passed the America COMPETES Act, giving NOAA broad

legislative authority to promote and coordinate formal and informal education.

The Office of Education develops the NOAA Education Plan to:

- vision an environmentally literate public developed through improved lifelong education in "NOAA-related" fields
- develop a future science, technology, engineering, and mathematics workforce, particularly from underrepresented groups, in disciplines critical to NOAA's mission
- support an informed society that uses a comprehensive understand of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions

Outcomes

- Provide effective environmental education programs that address relevant topics and are based on solid science
- Educators understand and use environmental literacy principles
- Educators and students understand Earth Systems and make informed decisions regarding the environment and its resources
- Lifelong learners utilize informal science education opportunities
- An increased awareness by education and research communities of NOAA's mission, as well as student and potential career opportunities
- Students and teachers learn about and explore NOAA science and stewardship

4.2.6.1 Basic Products and Services

NOAA's Office of Education provides advice and counsel to the Office of the Under Secretary and the Department of Commerce on matters dealing with education, leads the NOAA Education Council, and coordinates education activities across the agency. The Office of Education assists

the Education Council in the development of corporate policy and provides strategic advice and direction to NOAA leadership on education issues. The Office of Education runs grant programs to engage partners in delivering NOAA-related content through formal and informal education.

The Educational Partnership Program, a component of the Office of Education, with Minority Serving Institutions provides

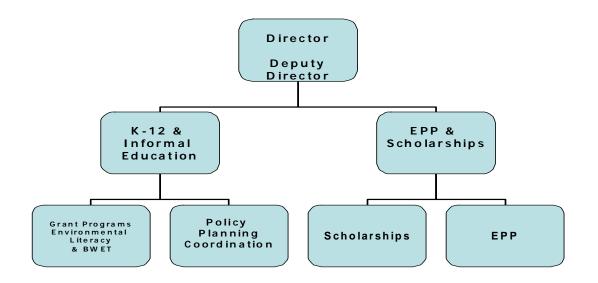
Evaluation

- Evaluation is required for all NOAA environmental literacy efforts.
- In addition, the Office of Education is coordinating an independent study led by the National Research Council to assess NOAA education programs

financial assistance to minority serving academic institutions to support collaborative research 105

and training of students in NOAA-related sciences through competitive processes. This activity strengthens the capacity of, and promotes educational excellence and economic opportunities for, Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges and Universities, and American Indian, Asian American and Pacific Islanders and Alaska Native Institutions respectively.

4.2.6.2 Organizational Structure



4.2.6.3 Education Roles and Responsibilities

The NOAA Office of Education provides advice and counsel to the Office of the Under Secretary and the Department of Commerce on matters dealing with education, leads the NOAA Education Council, and, in conjunction with the NOAA Education Council, coordinates education activities across NOAA and oversees the implementation of NOAA's Education Plan and Policy. These efforts help to ensure that NOAA's education programs and activities are based on NOAA science and support the agency's cross-cutting priority of promoting environmental literacy.

Line and Staff Offices (LO/SOs) appoint senior staff members to NOAA's Education Council. Their primary responsibility is to serve as a forum in NOAA for the discussion of ideas and proposals for NOAA-wide education activities and priorities and make recommendations to NOAA management on all aspects of NOAA's educational activities. Line and Staff Office Council members represent their Offices' interests and activities dealing with education and outreach programs and serve as the key contact on all issues affecting their organizations' interests.

Goals identify, coordinate and fund cross cutting education initiatives within their programs and among goal teams. Three out of the five goal teams have outcomes that promote and support environmental literacy.

Programs appoint senior staff members to NOAA's Education Council. Their primary responsibility is to serve as a forum in NOAA for the discussion of ideas and proposals for NOAA-wide education activities and priorities and make recommendations to NOAA management on all

aspects of NOAA's educational activities. Council members represent their programs' interests and activities dealing with education and outreach programs and serve as the key contact on all issues affecting their programmatic interests.

The Education Council, in conjunction with the Office of Education, coordinates education activities across NOAA and oversees the implementation of NOAA's Education Plan and Policy.

4.2.6.4 Additional Information

NOAA has many educational programs that serve the interests of NOAA's diverse missions and legislative authorities. Education efforts are directed at students, teachers that deal with NOAA science related subjects such as oceanography and meteorology, and the science interested public. Partnerships with other relevant organizations are key to the success of NOAA's programs stretching dollars and expertise to its fullest.

For more information on NOAA's Office of Education and Education Council can be found at:,

- www.oesd.noaa.gov/
- www.oesd.noaa.gov/council/index.html

4.2.7 INTERNATIONAL AFFAIRS

A world with rapidly shifting political, cultural, and economic dynamics requires Federal agencies involved in world affairs to cultivate fresh approaches and new services to maintain U.S.

leadership. Oceans and atmosphere are inherently transboundary and do not respect national boundaries. Therefore, the nature of NOAA's mission requires that NOAA engage across those same boundaries, and maximize the mutual benefits of international exchange with its international partners. NOAA has identified international leadership as a priority.

Outcomes

- International collaboration that significantly benefits society environmentally, economically, and socially
- International endeavor that achieves the Nation's integrated research, management, and scientific objectives

We work to leverage multilateral and bilateral relationships to take full advantage of the development and use of research, observations, environmental science, and ecosystems management.

We promote international consensus and cooperation in support of NOAA's mission and U.S. foreign policy through multilateral and bilateral engagement and relationships

The Deputy Assistant Secretary for International Affairs is the principal advisor to the Under Secretary on international matters. He represents NOAA and the United States internationally, and manages NOAA's international enterprise. The position is supported by the Office of International Affairs, by the Line Office's international offices through matrixed management authority, and by the NOAA International Affairs Council, of which the DAS/IA serves as Chair.

4.2.7.1 NOAA's International Engagement

NOAA officials serve as the United States' representatives to the World Meteorology Organization (WMO), the Intergovernmental Oceanographic Commission (IOC), the Group on Earth Observations (GEO), the International Whaling Commission (IWC), the International Convention for the Conservation of Atlantic Tuna (ICCAT), and many other prominent international organizations. In addition, NOAA occupies leadership positions in many multilateral fora, including the Caribbean and South Pacific Regional Seas, the Arctic Council, Antarctic Treaty, Asia-Pacific Economic Cooperation, UNEP, IMO and the United Nations Informal Consultative meeting on oceans.

NOAA serves as a lead agency and provides support for several priority bilateral relationships (including fisheries, oceans, meteorology, earth systems, remote sensing, data, climate science, and science and technology), between the United States and other governments, including China, Canada, Mexico, South Korea, Russia, Vietnam, India, the European Union, Australia, New Zealand, the Caribbean and Pacific regions, among others.

NOAA officials are active at an expert level, engaging in numerous international projects and conferences, representing state-of-the-art expertise, promoting NOAA's mission objectives, and bringing international resources and expertise to benefit NOAA's programs.

International engagement is supported as an integral part of NOAA's work throughout the agency, recognized in all of its Line Offices, all of its Goal Teams and virtually all of its programs. A review of NOAA's international investment, based on FY03, identified resources close to \$100,000,000 dedicated to and supporting international work, across NOAA.

In 2005, NOAA articulated a Statement of International Goals that identifies the international policy objectives associated with each of NOAA's Mission Goals. (www.international.noaa.gov/Overarching%20International%20Goals_11-28-05-1.pdf)

4.2.7.2 NOAA International Affairs Council

International Affairs Council - The International Affairs Council serves as NOAA's focal point for international policy, activities, and important crosscutting topical areas. The IAC is the advisory, information sharing, and coordinating group at the center of NOAA's international affairs management process. It is also responsible for making recommendations, through the Deputy Assistant Secretary for International Affairs, to the NOAA Executive Council (NEC) concerning international policy, objectives and priorities. Using the Council, NOAA international affairs is managed using matrix management principles to ensure coordination, cooperation, and communication on international activities, and to enhance the visibility of NOAA's international activities and accomplishments.

IAC Operations Committee – comprised of the Directors of the HQ and LO International Affairs Offices and Chaired by the DAS/IA, this committee addresses the management and administrative functions across the agency, promoting communication, collaboration and cooperation in achieving our day-to-day responsibilities and meeting shared challenges.

Additional committees have been established for topical focus:

Polar Committee
Marine Debris International Committee
High Seas Biodiversity Working Group
Law of the Sea Convention Working Group

Using the IAC, NOAA has established procedures for communication, collaboration and cooperation across the Line and corporate offices with respect to international activities, including for reviewing and finalizing international agreements, nominating Embassy Science Fellows, responding to annual requests for information regarding NOAA's international engagement, supporting foreign travel requirements, etc.

4.2.7.3 Organizational Structure

NOAA's international engagement is supported by international affairs offices at NOAA headquarters and in each of NOAA's Line Offices, under the leadership of the Deputy Assistant Secretary for International Affairs. Collectively and individually, these offices provide policy leadership, expertise and advice, represent NOAA and the United States in international

relationships, conduct projects and provide technical assistance, and provide staff and administrative support.

4.2.7.4 Roles and Responsibilities

The Deputy Assistant Secretary for International Affairs is NOAA's lead advisor to the Under Secretary/Administrator on international policy issues. He or she is responsible for planning and coordinating NOAA's international programs, and carrying out tasks of special interest related to international activities. He or she exercises a leadership role in establishing policies, guidelines, and procedures for NOAA's international programs, including:

- a. coordinate NOAA's major international activities including those programs that overlap Assistant Administrators' or Staff Office Directors' interests or responsibilities;
- b. support the development and coordination of NOAA's international policies regarding "trade and environment" issues and the negotiation of trade agreements;
- c. coordinate NOAA's interactions on international issues with other Federal departments and agencies, as well as other bureaus within the Department;
- d. develop Administration policy on international issues affecting NOAA;
- e. coordinate NOAA's participation in United States (U.S.) delegations to international fora; and
- f. participate in the negotiation of international agreements and appropriate representation of NOAA and the Department at international fora on environmental issues.

The Deputy Assistant Secretary for International Affairs conducts these responsibilities through the following:

- The NOAA Office of International Affairs
- The NOAA International Affairs Council
- Liaison with the International Affairs Offices of each of NOAA's operating units

4.2.7.5 Additional Information

More information on NOAA's International efforts can be found at www.international.noaa.gov (this includes links to other NOAA IA offices) or by contacting the Office of International Affairs.

4.3 MANAGEMENT OF RESOURCES

Management of Resources:

- Enterprise Architecture and Information Technology (IT) Management
- Facilities Management
- Satellite Management
- Acquisition
- Grants
- Sections Under Development
- Administrative Management
- Ship and Aircraft Management
- Financial Management
- Human Resource Management

NOAA's Management of Resources functions operate across service areas to enable the Agency to operate efficiently. These functions supply a foundation for leveraging competencies, capabilities, IT resources, and administrative services.

Administrative services involve the day-to-day management and maintenance of the internal infrastructure, workplace policy development and management, and security management. Facilities management supports acquisition, construction, and maintenance of government-owned facilities and equipment.

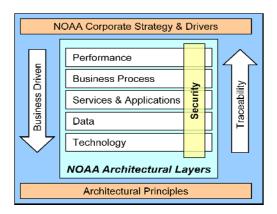
Program Support also includes financial management, such as day-to-day accounting processes, grants and acquisition management, and all facets of human resource and personnel

management. Information and technology management is also a vital element of program support, coordinating information and technology resources and systems required for all NOAA functions.

4.3.1 Enterprise Architecture and Information Technology Management

In response to Federal mandates to improve how US Government agencies select, acquire, deploy and manage their extensive technology resources (e.g., the Clinger-Cohen Act of 1996), NOAA initiated an Enterprise Architecture (EA) to provide a framework and blueprint to guide the future direction of its information technology (IT) investments This future direction is explicitly driven from NOAA's corporate strategy and business priorities, using a "top-down" and business driven methodology for aligning IT investments with corporate mission requirements.

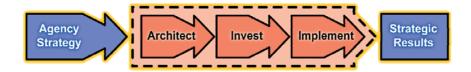
In this methodology, NOAA's current and future enterprise (as envisioned in the Strategic Plan) is organized and described in the context of an industry standard architectural framework, as depicted below:



Each of NOAA's architectural layers are comprised of a set of conceptual models and requirements, which are developed in collaboration and partnership with business and technical Subject Matter Experts (SME's) across NOAA, and documented in architectural repositories such as CasaNOSA and related tools.

With visibility across all NOAA programs and Line Offices, the EA is uniquely positioned to facilitate a consistent "apples to apples" view of each architectural layer of the NOAA enterprise, thus exposing opportunities to reuse or consolidate IT solutions to meet common business problems in the most cost effective manner possible. The EA also documents the relationships across the architectural layers, thus enabling clear "line-of-sight" traceability from the corporate business and performance requirements to the IT investments that are intended to enable or support these requirements.

The NOAA EA is also grounded in OMB's Performance Improvement Lifecycle, which positions the architecture function as a precursor to the Capital Planning and Investment Control (CPIC) and Implementation functions as depicted below:



In the context of the above Performance Improvement Lifecycle, the NOAA EA seeks to augment and inform the overall PPBES process, resulting in a coordinated strategy and plan for transitioning to an interoperable, cost effective and high-impact IT portfolio that is explicitly traceable to NOAA's Strategic Plan.

As the above diagram indicates, a key component of NOAA's OCIO efforts to develop and implement an EA begins with a vision of what is possible and attainable, as articulated in NOAA's Strategic Plan, Strategic IT Plan (SITP) and other strategic documents. The IT Strategic Plan articulates how NOAA intends to support each of its Mission Goal Areas with IT aligned to promote effective business operations. The SITP is updated annually and covers a 5-year rolling time period. It serves as NOAA's conscience in how the agency's extensive investments in technology can best be applied to manage and prioritize advanced programs of scientific research, environmental protection and education about the Nation's oceanic and atmospheric resources.

4.3.1.1 How Does the Enterprise Architecture Work?

Operated as a key program within NOAA's Office of the Chief Information Officer (OCIO), the EA provides "line-of-sight" traceability from NOAA's IT investments to the mission goals and business objectives they are intended to support. The EA accomplishes this using common terminology and industry standard methodologies to describe various dimensions of NOAA as an enterprise. It also documents enterprise-wide performance, business, application (services), data, and infrastructure requirements. In this way, the EA can help shape NOAA's Strategic Plan and supports the agency's IT governance structure. Therefore, NOAA's EA is actionable and driven by business priorities. It also has broad ownership and is being applied consistently throughout NOAA. Importantly, the EA promotes standards-based IT solutions and promotes collaboration on shared IT solutions for common business requirements.

The EA is poised to deliver significant benefits to NOAA's institutional processes and IT governance by:

- Augmenting the PPBES process through architectural analyses of alternative solutions,
- Exposing redundant IT investments and opportunities to consolidate,
- Assuring appropriate security is embedded in NOAA's IT solutions,
- Linking technology investments to stated mission goals and objectives,
- Encouraging use of industry best practices in managing technology,
- Enabling IT managers to identify and consider the enterprise implications of their IT decisions, rather than basing decisions solely on local needs.
- Maximizing data sharing across programs and applications, and
- Incorporating government standards that enable compliance with Federal IT management mandates.

4.3.1.2 IT Roles and Responsibilities

The NOAA Office of the Chief Information Officer (OCIO) ensures that NOAA's programs make full and appropriate use of IT. This is accomplished by the development of centralized policies and guidance, which are implemented across NOAA and Line Offices. The OCIO works closely with business partners throughout NOAA and the Department of Commerce to ensure the use of leading edge technology that will better enable the NOAA mission.

The NOAA CIO Council advances the management and utilization of IT to achieve NOAA corporate goals and objectives. This is accomplished by establishing enterprise wide IT policies, procedures, standards, and practices. The Council also coordinates and integrates best practices promulgated by DOC, OMB, and the Federal CIO Council. In addition, the CIO Council oversees NOAA wide IT projects and operations which are funded via organizational cost distribution and other projects as tasked by the NOAA CIO, or NOAA management. Finally, the Council approves and prioritizes the NOAA OCIO budget including projects and services supported by NOAA corporate funds.

The NOAA IT Review Board (NITRB) reviews proposed investments to ensure they contribute to NOAA's strategic vision and mission, employ sound IT investment methodologies, comply with NOAA systems architectures, and provide the highest return on the investment with acceptable project risk.

The DOC IT Review Board (CITRB) serves essentially the same function as the NITRB, but from departmental perspective. Selected NOAA investments (generally major and/or high visibility investments) are subject to CITRB review. The CITRB acts as a board of directors that advises the Secretary and Deputy Secretary on critical IT matters. The CITRB ensures that proposed investments contribute to the Secretary's strategic vision and mission requirements, employ sound IT investment methodologies, comply with Departmental systems architectures, employ sound security measures, and provide the highest return on the investment or acceptable project risk.

4.3.1.3 Next Steps for NOAA's Enterprise Architecture

The OCIO, with the active participation of every Line Office, is discovering and documenting the full range of enterprise processes and supporting technology. An understanding of the interplay between NOAA's current technical assets promotes ever increasing collaboration and integration. This effort will enable NOAA to improve its efficiency, better manage IT costs, enhance the agility of its IT infrastructure, more readily embrace new technology, and adopt interoperable and secure enterprise IT solutions.

Through the EA, a catalog of NOAA services and capabilities is also being developed. This effort will contribute to defining a vision and target architecture for NOAA, which will enhance our ability to identify performance gaps, evaluate alternatives to close gaps, and to develop sound transition strategies to implement selected alternatives. The NOAA Functional Model (see chapter 2) represents NOAA's enduring functions and, integrated with a catalog of NOAA services and capabilities, will serve as the business level of the NOAA Enterprise Architecture.

The EA is strengthening NOAA's IT governance as well. Its work is being increasingly relied upon and integrated with the IT Capital Planning, budgeting and program evaluation processes (through PPBES). In the future, all IT acquisitions will comply with NOAA's target architecture and follow best practices for IT management (for example, by fully documenting alternatives analyses and developing well-crafted business cases). Over time, NOAA's EA will allow the enterprise to continuously strike the proper balance among issues of agency risk, cost, and requirements in the area of IT management.

4.3.1.4 Guiding Principles

Federal agencies are required to identify IT Management principles to ensure proper decision making and overall management of its IT investments. These principles are essential to achieve effective and consistent governance of enterprise IT resources. In response to this requirement, the NOAA CIO Council vetted and approved the following principles in 2008, which apply to all NOAA operating units:

Principle: NOAA's IT initiatives and strategies are focused on supporting business priorities,					
processes, and goals prioritized through the budget process.					
Statement	Mission goals and business priorities are the primary drivers for all IT initiatives.				
Rationale	IT initiatives within a business-driven architecture more effectively support strategic goals, respond to changing organizational needs, and promote operational objectives.				
Implications	New IT initiatives must demonstrate a positive impact on NOAA's mission and measurably contribute to approved business objectives in support of that mission.				
	IT initiatives must demonstrate "line of sight" traceability from the implemented technical components to the expected business performance objectives (e.g., mission outcomes or results).				
	The most cost-effective IT solution that meets the business requirement will be chosen.				
	In targeting business requirements, IT initiatives will prioritize mandated and essential functions, continuity of operations, and critical mission areas.				

Principle: Wherever possible and practical, and without diminishing the delivery of services, NOAA implements IT solutions that share and/or reuse common processes, services, infrastructure, and system components.					
Statement	Enterprise applicable technical solutions must be considered and sought out before "one-off" solutions, which may meet the needs of a limited constituency, but are duplicative or insufficient when viewed from an enterprise perspective.				
Rationale	As a single enterprise, NOAA is comprised of varied missions that share strategic targets, operational requirements, business processes, and governance objectives. Reuse and sharing of existing IT solutions leverage NOAA's investments, and create potential economies-of-scale that result in more cost effective delivery of IT services. Additionally, shared solutions promote an integrated IT environment and reduce the complexity of NOAA's overall IT structure.				
Implications	 Duplicative capabilities will not be supported when an enterprise scalable solution is already in place or proposed as a viable alternative. Whenever possible, IT initiatives must be simple, self-contained, modular in design, interoperable with existing backbone services, and can be implemented enterprise-wide to bring measurable and verifiable effectiveness to the entire organization. 				

- The architectural design of new IT capabilities must consider and incorporate standardized options (through implementation of standard API's, etc.) that enable reuse by others in the future.
- Shared IT solutions will require a new mindset for IT governance that relies upon broad collaboration, mutual agreements and trust across multiple IT initiatives.

includes the d disseminate, a	IOAA maintains appropriate security, privacy, and protection of its IT assets, which ata collected or produced as well as the systems and networks that process, and store this information.
Statement	NOAA has a statutory obligation to protect its official information, data, and technology components and secure these assets in accordance with applicable Federal regulations and guidance.
Rationale	Information security and privacy are necessary and integral aspects of NOAA's operations. Integrity, availability, confidentiality and accountability are values NOAA is dedicated to ensuring in operating its critical information systems under all conditions.
Implications	 An IT system's operational context defines the appropriate level of security and privacy protection based on Federal regulations. IT security policies, guidelines and risk-based system security plans are integrated into all levels of NOAA's management processes and technical operations. They are continuously monitored for compliance to minimize improper use and unauthorized access to IT resources. IT security controls are implemented from an enterprise perspective, clearly defined, and consistently applied as required and mandated.

Principle: NOAA treats its data and information as corporate resources and manages them appropriately throughout their life cycles. Note: The term "life cycle" includes collection, processing, discovery, access, storage, disposal, and preservation.					
Statement	Data and information are critical corporate resources that are managed throughout their life cycles, enabling NOAA to effectively make decisions in the acquisition, integration, management, dissemination, and archival of these resources.				
Rationale	Environmental data and information are NOAA's most important (non-human) assets and are critical to the nation's economy, security, and quality of life. NOAA is dedicated to effectively leveraging the use of its data and information throughout the enterprise in order to promote partnerships and provide diverse products and services.				
Implications	 Authoritative data and information sources must be precise, accurate, reliable, and accessible in order for NOAA to achieve excellence in information delivery and sharing. To better support NOAA's mission, managed data and information access will be standardized throughout the enterprise, regardless of location or organization. Collected data, particularly environmental and geospatial data, will be structured and catalogued in accordance with published metadata standards, as appropriate, to enable effective management. 				

Principle: NOAA bases IT acquisitions, development, and operations upon well-defined, approved, widely publicized, and transparent standards.				
Statement	To assure quality performance, the development, acquisition, and operations of all NOAA IT initiatives will be standards-driven through consistent use of defined sets of technical and measurable rules.			
Rationale	IT is managed efficiently and effectively when technical decisions adhere to properly articulated and consistently applied standards.			
Implications	Identifying standards relevant to each critical phase of IT management provides consistency and maximizes portability, interoperability, and compatibility among systems.			
	Enterprise-wide standards will be used to determine when it is appropriate for NOAA to acquire commercially available services and products, invest in homegrown technical development, or initiate acquisitions that pertain to emerging and proprietary technologies.			
	An approved governance model will include a qualified waiver process for unique circumstances.			

4.3.1.5 Additional References

The current NOAA Enterprise Architecture Document can be found at https://secure.cio.noaa.gov/Docs/EA_v_3.0_Redactedv2_pword_protected.pdf (available only to NOAA employees with network access privileges). Detailed NOAA Architectural processes, including a description of the relationship between the EA and PPBES processes can be found in Appendix B of the above document.

4.3.2 FACILITIES MANAGEMENT

NOAA's Real Property inventory includes approximately 800 buildings, of which 55% are DOC-owned and 45% DOC-leased or General Service Administration (GSA) assigned. These facilities are located throughout the 50 States, Guam, Puerto Rico, and Pacific Region. The scope of NOAA Facilities Management encompasses all new construction, major and minor renovation and repair, operations and maintenance of the real property inventory, facilities physical security, and environmental compliance projects affecting facilities.

The NOAA Facilities Program is comprised of the following interrelated functional areas:

Capital Planning and Budgeting:

- long-range facilities program planning,
- policy development, and
- program execution

Asset Management and Maintenance:

- operations and maintenance,
- integrated facility condition assessment,
- policy and oversight of real property acquisition,
- · operating leases, and
- asset management services

Project Planning and Management:

- planning and life-cycle project management,
- construction project management,
- policies and processes for project planning, project management, and progress/performance metrics (including earned value management reporting),
- coordinates the development of alternatives,
- selection of service provider,
- acquisition strategy, and
- executive level oversight, coordination, and reporting for all major construction projects

Services Provided

- A safe operating environment with efficient and effective support services
- A policy of procedures and valuation criteria that aligns goals, objectives, and values of Mission Goals and Programs to achieve NOAA's overall mission
- Integration of facilities investment decisions into the strategic planning process and evaluation of facilities as mission enablers

4.3.2.1 NOAA Facilities Program Business Model

The Facilities Program Business Model was adopted in 2004 by the NOAA Executive Panel (NEP). It enables effective management of the NOAA facilities program and compliance with Executive Order (EO) 13327 (Federal Real Property Asset Management) and OMB Circular A-11 (Planning, Budgeting, Acquisition, and Management of Capital Assets) and provides a framework for facilities management within the PPBES process. Specific NOAA guidance on the management of NOAA facilities is contained in the Facilities Capital Planning and Project Management Manual and in the Project Management Process found at http://www.corporateservices.noaa.gov/~rpflo/PPMD/services.

The Facilities Business Model Framework keys off of the Strategic Plan Performance Objectives which relate to facilities, tying them to Strategic and Tactical initiatives. The decisions concerning courses of actions at the *strategic* level are driven by portfolio level analysis, mission requirements, and NOAA corporate direction, while the *tactical* level execution is driven by facilities condition, mission criticality, usage, and overall costs in accordance with EO 13327.

Facility Modernization

Initiative: Framework Strategic Plan Strategies/Initiatives **Performance Objectives** STRATEGIC Regionalization? "Increase Number of Facilities Active Consolidation with Improved Co-Location of NOAA Services and Partners...." Consolidation "Opportunities **TACTICAL** Recapitalization/Replacement "Improve Safety and Other Restoration Condition Indices for Facilities...." Sustainment

Figure 4.3.2.1-1

Management Infrastructure

Each model element is defined outlined below.

Regionalization/Consolidation: Support better integration of service delivery through enhanced collocation (across NOAA and with partners), and achieve cost efficiencies by reducing operation and maintenance costs.

Recapitalization/Replacement: Recapitalize/replace existing NOAA facilities to maintain a modern facilities inventory, relevant in an environment of increasing energy costs and changing standards and missions. [General Target: Recapitalize at 80 percent of facility's useful life, unless earlier replacement is required due to natural disasters or other events, or unless facility condition assessment indicates longer useful life.]

Restoration: Restore NOAA facilities (owned and leased) to "Fair" or better facility condition index, and address most critical facility condition issues.

Condition	FCI (%)
Excellent	.95
Good	.90
Fair	.85 to .90
Poor	.80 to .85
Unacceptable	<.80

Facility Condition Index (or FCI) is calculated by dividing the total cost of required repairs by the current replacement value for the facility:

Sustainment: Maintain safe, secure and operational working environments. Ensure appropriate level of annual investments in routine maintenance and repairs to maintain facilities and sustain useful life of facilities.

Management Infrastructure: Establish and maintain organizational capabilities, governance policies and processes, performance measurement systems to effectively and efficiently manage the NOAA real property portfolio and ensure compliance with all applicable DOC and Federal, state and local standards.

4.3.2.2 Facilities Modernization Plan

NOAA annually publishes a Facility Modernization Plan (FMP) to integrate the various components of the Business Model, PPBES process, Homeport Planning, and other initiatives into a cohesive document. The current FMP can be found at http://www.corporateservices.noaa.gov/~ocao/index

The FMP establishes a foundation for addressing challenges in the facility program as well as to promote excellence in NOAA's facilities that is consistent with NOAA's Strategic Plan. It also reflects the efficiencies envisioned by Executive Order 13327 (*Federal Real Property Asset Management*) and the President's Management Agenda, and is designed to promote excellence in NOAA programs by attracting and retaining a high-performing workforce.

The following real property goals form the basis of this plan:

- Ensure real property acquisition and sustainment is integral to NOAA mission planning and programming.
- Align real property assets to strategic requirements and NOAA objectives including support of regional collaboration, NOAA fleet homeporting, and evolving program goals as developed by the NOAA Strategic Goal Teams.
- Sustain and modernize existing real property to achieve appropriate condition levels and ensure NOAA's property is safe, secure, environmentally sound, and cost-effective.

It includes discussion of real property management challenges and strategies, real property inventory characteristics, roles and responsibilities, and decision-making processes. It recommends levels of investment into the facility program, and targets projects to form the basis of a long-range Capital Investment Plan. The FMP is dynamic and evolutionary to reflect both the changing portfolio of NOAA's real property assets and evolving needs of NOAA's mission managers. The Plan recommends sustainment levels necessary to maintain facility condition

levels, as a guide for the Line Offices and programs. The Plan also targets raising NOAA's overall facility condition to the "good" or "excellent" level within the next 10-15 years, and envisions recapitalizing facilities at an average age of 50 years to address obsolescence and modernization.

4.3.2.3 General Roles and Responsibilities

The NOAA Office of the Chief Administrative Officer (OCAO) provides planning guidance, establishes priorities with LO/goals/programs' input for restoration and recapitalization investments, executes restoration and recapitalization projects as "Provider of Choice"— optimizing investments in strengthening NOAA's facility program, provides oversight and corporate reporting on execution and sustainment of corporate complexes.

Line and Staff Offices (LO/SOs) identify facility program requirements and priorities, collaborates with goals/programs on sustainment requirements, collaborates with OCAO in developing execution plans and reporting, serves on integrated project teams and sustainment of non-corporate facilities.

Goals/Programs identify facility program requirements and priorities and serve on integrated project teams, as appropriate.

Acquisition Review Board. All major projects must be approved by DOC's Acquisition Review Board before inclusion in the President's Budget Request.

NOAA General Counsel. As necessary, General Counsel review is sought on legal matters and NEPA compliance issues as part of the project Key Decision Point process.

Safety Council. Relevant Facilities issues are reviewed by the Safety Council.

Chief Financial Officer/Chief Administrator Officer Council. This Council provides general overview and guidance on facilities policy and procedural matters not requiring NEP/NEC review.

NOAA Facilities Investment and Management Board. In accordance with NAO 217-104, all proposed major investments shall be assessed by the NOAA Facilities Investment Management Board (FIMB).

4.3.2.3.1 PPBES Roles and Responsibilities

In addition to the above the following is provided to clarity PPBES Roles and Responsibilities

		Planning	Programming	Budgeting	Execution
Sustainment	Corporate Program	Provides Corporate Guidance and Solicits Input for 100% Requirements	Develops Corporate Sustainment Plan within Overall Programming Guidance	Reflects Corporate Complex Sustainment Funding within "Facilities" Budget Line	Corporate Oversight
		Identifies Annual Sustainment Investment Requirement for NOAA-owned facilities			Develops Quarterly Corporate Execution Reports
		Identifies 100% requirement for NOAA-owned Corporate Complexes (WRC; PRC in future)			Executes Sustainment Investments for Corporate Complexes; and for LO projects as negotiated
	Line Offices	Submits LO Facility Requirements for other (non Corporate Complex) Facilities; Ensures Goals/Progams reflect sustainment requirements in program plans	Recommends Facilities Sustainment Priorities: Submits Proposed "Spending" Plan to OCAO; Ensures Goals/Progams reflect sustainment requirements in program plans	Finalizes LO Sustainment Spending Plan Based on NOAA Budget Guidance and Reflects in LO Budget; Submits Spending Plan to OCAO (informational) with crosswalk to specific budget lines; identifies OCAO PM support required	Finalizes and Executes LO Sustainment Spending Plan; Submits Spending Plan and Quarterly Execution Reports to OCAO
	Goals/Programs	Incorporates sustainment requirements in program plans.	Incorporates sustainment requirements in program plans.	No Action Required	No Action Required

		Planning	P ro gram min g	Budgeting	Execution
Restoration		Provides Corporate Guidance and Solicits Input for 100% Requirements		Prepares Corporate Facility Restoration Budget within "Facilities" Budget Line; Develops Supporting Spending Plan	Finalizes Corporate Facility Budget Spending Plan; Quarterly Corporate Execution Reporting
	Corporate Program	Identifies Annual Restoration Investment Requirement for NOAA-owned Facilities – Facility Condition Index Data			
		Identifies 100% Restoration Requirement for NOAA-owned Complexes (WRC; PRC in future)			Executes Comprate Complex Restoration Projects; Monthly Execution Reports
		Solicits Input from LOs & Goals/Programs on 100% Restoration Requirement			Executes LO Restoration Projects as "Provider of Choice" under agreements with LOs; Monthly Execution Reports
		Identifies 100% Facility Restoration Requirements– to OCAO	Submits Recommended LO Facilities Restoration Priorities to OCAO	In collaboration with OCAO Project Management staff, Develops Execution Plan to Support Corporate Restoration Spending Plan	to non-OCAO executed Projects; Serves on Integrated Project Team for
		Provides Input to 100% Facility Restoration Requirements	Submits Recommended Facilities Restoration Priorities to OCAO	No Action Required	No Action Required

		Planning	Programming Progra	Budgeting	Ex e cution
Recapitalization	Corporate	Provides Corporate Guidance and Solicits Input for 100% Requirements		Prepares Corporate Facility Recapitalization Budget within "Facilities" Budget Line; Develops Supporting Spending Plan	Finalizes Corporate Facility Budget Spending Plan; Quarterly Execution Reporting
		Identifies 100% Recapitalization for NOAA- owned Complexes (WRC; PRC in future)			Executes (as "Provider of Choice") Recapitalization Projects
		Solicits Input from LOs & Goals/Programs on 100% Recapitalization Requirement			Executes (as "Provider of Choice") Recapitalization Projects
	Line Offices		Submits Recommended LO Facilities Recapitalization Priorities to OCAO	No Action Required	Serves on OCAO-led Integrated Project Team
	Goals/Programs	Facility Recapitalization	Submits Recommended Facilities Recapitalization Priorities to OCAO	No Action Required	Serves on OCAO-led Integrated Project Team, as appropriate

4.3.2.4 Additional Resources

More information on NOAA Facilities Management is available at

www.corporateservices.noaa.gov/~ocao/index.html

The site provides links to the Facilities Modernization Plan, the Facilities Capital Planning and Project Management Manual (draft), and related documentation on facilities management processes and procedures.

4.3.3 SATELLITE MANAGEMENT

NOAA's Satellite Program provides observational data that advances society's knowledge of the environment. This program manages satellite acquisitions and operations to ensure continuous

global monitoring to assess environmental conditions of the atmosphere, oceans, and land. It produces and maintains products and services that support NOAA's ability to transform Earth and space observational data into resource management decisions that ultimately create improvements in public safety, security and quality of life. The program objective is to increase quantity, quality, and accuracy of satellite data processed and distributed within specified timeframes.

Continuous monitoring of

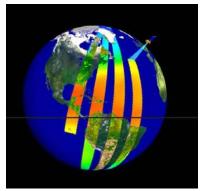
- Atmosphere
- Oceans
- Space
- Land

In addition, the Satellite Program is leveraging world-class science and technology capabilities with international partners to develop new or improved product applications, information services, forecasts, and predictions. Examples are the strong international partnerships with the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), and the French Space Agency (CNES). NOAA, NASA, CENS, EUMETSAT have joined to transition satellite-based altimetry into operation. Future satellite missions of counties like India, Japan, China, and Taiwan will be executed in collaboration with NOAA for instrument and data sharing.

The NOAA Satellite Program consists of the Polar Operational Environmental Satellites (POES), the National Polar-orbiting Operational Environmental Satellite System (NPOESS), the Geostationary Observational Environmental Satellites (GOES), Satellite Services, and Commercial Space Services.

4.3.3.1 POES

The POES Program has existed since the early 1960s with the launch of TIROS I. Since then, NOAA has maintained a fleet of operational polar orbiting satellites carrying scientific imaging and sounding instruments and has requirements to maintain the continuity of data from these instruments. POES is the current operational polar fleet with one satellite remaining to launch, NOAA-N Prime. The POES series provides daily global observations of weather and measurements of the Earth's atmosphere, its surface and water bodies, and the space environment (proton and electron flux)at satellite altitude. POES data are also used in climate



studies due to its polar coverage and data continuity requirements. POES' current two operational satellites, NOAA-17 and NOAA-18, provide coverage of mid-morning and afternoon orbits, respectively, yielding 6 hours of daily global sampling. With the launch of N Prime, the follow-on mission, NPOESS, will ensure the continuity of data.

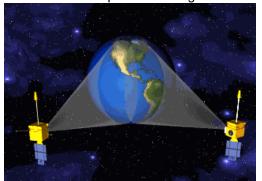
4.3.3.2 NPOESS

Presidential Decision Directive – PDD/NSTC-2, Convergence of U.S. Polar-orbiting Operational Environmental Satellite Systems, issued May 5, 1994, directed the Department of Commerce, Department of Defense and the National Aeronautics and Space Administration (NASA) to establish the NPOESS. The purpose is to reduce the cost of acquiring and operating polar-orbiting environmental satellite systems while continuing to meet U.S. Polar observational data requirements. To manage and develop the NPOESS, NOAA, NASA, and DOD established a triagency coordinating office, the Integrated Program Office (IPO). IPO is working toward launching the first of a series of NPOESS spacecrafts to provide global coverage with a data refresh rate of approximately four hours. In addition, plans include a globally distributed ground system which will deliver 95 percent of data within 28 minutes of on-orbit collection. Additional information about POES and NPOESS can be found at the following URLs:

www.osd.noaa.gov/POES; www.ipo.noaa.gov/; www.osd.noaa.gov/OSTM

4.3.3.3 GOES

The GOES Program has existed since 1974 and due to its geosynchronous orbit, provides continuous hemispheric coverage from the West and East constellation. Continuous monitoring



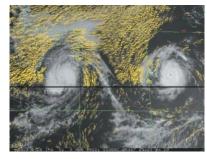
of severe storms and retrieval of atmospheric moisture gradients, currents flow dynamics and atmospheric chemicals can only be effectively achieved from a stationary orbit, such as GOES' geostationary orbit, without increased error rate and/or loss data segments. These products support weather forecasting and various other applications, making the data provided by GOES very important to the nation. The GOES Program is currently coordinating three satellite series. The GOES-I

series, (GOES-10 -12) is the current operational series, with GOES 11 and 12 positioned in the East and West constellation, and GOES-10 supporting South America on a special assignment. GOES-13, which was launched in May 2006 from the GOES-N Series, is also operational and is in storage as the on-orbit spare. Two remaining GOES-N Series satellites, GOES-O and GOES-P, are scheduled to launch in 2008 and 2010, respectively. The next generation follow-on series, GOES-R, is a major system upgrade with initial launch capability in 2015. Historically, the GOES Program has worked closely with NASA to acquire and launch the satellite, and the GOES-R series acquisition will be no different. As such, the GOES Program activities are managed in Silver Spring, MD (NOAA) and in Greenbelt, MD (NASA). Additional information about GOES can be found at the following URL: www.osd.noaa.gov/

4.3.3.4 Satellite Services

Satellite Services supports user-generated requirements for satellite-based products and services developed by NOAA's Mission Goals. Primary functions include commanding and controlling spacecrafts to supporting a multi-satellite constellation of both polar and geosynchronous orbits and ensuring 24x7 operations of NOAA's National Mission Critical Systems enabling continuous

observation of environmental data. Currently, 14 environmental satellites are operating. From those systems, Satellite Services collects, navigates, calibrates and distributes operational and pre-operational data to Mission Goals and external partners to accurately monitor and observe the atmosphere, oceans, land, and space. Satellite Services operates from various facilities for the command and control of the satellites and direct readout broadcast of data (Wallops Island, VA and Fairbanks, Alaska), and for the production of



operational data for distribution and research (Camp Springs and Suitland, MD). In the near future, a new facility in College Park, MD will house some of Satellite Services activities. Additional information regarding Satellite Services can be found at the following URLs: www.orbit.nesdis.noaa.gov/star/index.html; www.nesdis.noaa.gov

4.3.3.5 Commercial Space Services

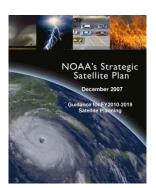


Commercial Space Services' (CSS) function is to promote a robust, responsive U.S. space-based industry that is the world leader in commercial space services; primary functions include licensing of U.S. commercial remote sensing satellite firms and ensuring licensed firms comply with licensing agreements. The CSS program also supports related policy development, associated international and interagency coordination, and a variety of outreach efforts to stakeholders in the government,

industry and the public. Additional program information regarding CSS is found at the following URLs: www.nesdis.noaa.gov/space; www.crscompliance@noaa.gov

4.3.3.6 Satellite Strategic Plan

NOAA must meet the expanding needs of the public for data, information, and services. Often a satellite solution tends to be the best way to gather multiple data at the same time. With user requirements in mind, NOAA has developed a 5-yr Satellite Strategic Plan (SSP), which outlines the Agency's observational portfolio, the assets' capabilities, funds required to maintain current missions, plans for follow-on missions and evaluation of new observational capabilities. The SSP is updated annually in coordination with the PPBES cycle and to take advantage of changes in the political and fiscal environment, schedule changes due to satellite acquisition slips or



satellite failures, as well as new studies and proposals by users and external partners. The SSP is a valuable tool that provides long-range program objective and guidance to ensure our Nation's economic, social, and environmental requirements through observational satellites are met.

4.3.4 NOAA'S ACQUISITION MANAGEMENT

The NOAA Acquisition function is integral to achieving NOAA's mission. In 2007, acquisitions and grants represented nearly 50% of NOAA's \$4.2 billion budget. Acquisition professionals must partner with our Line / Corporate Office and Department of Commerce colleagues to manage a complex acquisition process in an environment of constrained budgets and growing demands and expectations. The

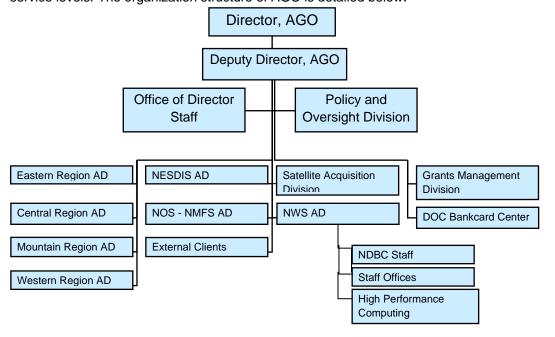
Services provided

- Acquisition of supplies and services ranging from design/build of NOAA facilities and restoration of marshes and coral reefs to aircraft and water vessels
- Assistance with acquisition planning
- Strategic Sourcing
- Management of field delegate programs
- Management of DOC purchase card program
- Management of Small and disadvantaged business program
- Informal client training and education

Acquisition and Grants Office (AGO) is the office charged with managing the NOAA Acquisition function.

4.3.4.1 Organizational Structure

In 2005, a new Department Organization Order was signed to move NOAA to a functional management model for administrative and financial services. This change established direct lines of accountability from Headquarters business managers to financial and administrative field staff. The functional management model provides a clear point of accountability in a senior functional manager for each function, which aimed to increase consistency and application of policy and service levels. The organization structure of AGO is detailed below:



4.3.4.2 Roles and Responsibilities

NOAA Acquisition and Grants Office (AGO) ensures acquisitions are processed. Works in concert with Line Offices early in the PPBES process, at which point Line Offices will develop and submit their Advanced Acquisition Plans (AAPs) to ensure that the needs of the programs are communicated.

Acquisition Liaison tracks acquisition status including collecting and submitting requests, monitoring request priorities, and disseminating information/communications for respective Line or Staff (Corporate) Office. Centralized knowledge management responsibilities include identifying and coordinating the development and dissemination of processes, policies, and standard operating procedures. Acquisition Liaisons are also members of the AMAC (see role below).

AMAC Members – cross-organizational committee with representatives from the Acquisition community in NOAA's Line and Corporate offices, AGO, DOC and other DOC bureaus The AMAC consults on high-priority acquisition issues and is vital in communicating changes in legislation, policy, and procedures to their respective offices.

Contracting Officer Representative (COR) prepares the technical portions of the acquisition package and reviews the acquisition for accuracy, incorporate guidance from AGO and Budget Execution Analysts into the early Programming phase, manage their contracts using project management standards, align AAPs with budgets, report on financials, and close out contracts.

Purchase Card Holder – An individual who is issued a government purchase card to purchase supplies and services (typically up to the micro-purchase threshold) and/or pay for official expenses in compliance with applicable regulations. Depending on the single purchase limit authorized for the Purchase Card Holder, this role may require a warrant.

Delegation of Procurement Authority – An individual designated to make purchases up to a predetermined limit above the micro-purchase threshold. DPAs manage their own purchases through the entire life-cycle of the acquisition process and collect and track metrics to ensure supplies and services are optimally acquired.

Acquisition Program Manager – An individual assigned to oversee and manage all aspects of a single acquisition, or a single program involving multiple acquisitions ≥ \$10M in value. This includes managing the acquisition from requirements development through receipt, acceptance, and closeout of the contract.

Requisitioner – Called "Purchasing Officers" in some cases, a Requisitioner is responsible for preparing the electronic Requisition using C.Request and submitting the Requisition to the appropriate Acquisition division. The Requisitioner works with the COR and the Contract Specialist after the acquisition need has been identified through completion of the award. The Requisitioner can also be the COR.

Contracting Officer – An individual authorized to perform the functions assigned by the FAR and the Commerce Acquisition Regulation (CAR) on behalf of the government, based on their specified warrant level. These functions include the development of, entering into, and administration of contracts. Contracting Officers coordinate and provide advice to stakeholders,

and manage contracts to ensure supplies and services are optimally acquired, from pre-award to closeout. A Contracting Officer may have a Level I (up to \$100,000), II (up to \$1,000,000), or III (unlimited) warrant.

Contract Specialist – An individual responsible for soliciting, awarding, and administering contracts exceeding \$100,000 using formal contracting procedures (e.g., sealed bidding, negotiation). The Contract Specialist prepares necessary contract modifications and contract actions for Contracting Officer approval, including changes to key personnel or CORs, application of liquidated damages, Quality Assurance Surveillance Plans, award fees, and assurance of receipt and acceptability of all deliverables in the contract. Contracting Specialists coordinate and provide advice to stakeholders and manage contracts to ensure supplies and services are optimally acquired. This role does not require a warrant.

Head of Contract Office – The HCO is a Contracting Officer and is responsible for managing the acquisition activity, day-to-day operations (including purchase card program), and overall performance of their division. HCOs are responsible for customer management and outreach, coordinating and providing advisory services to stakeholders, applying project management techniques to ensure supplies and services are optimally acquired, and managing and developing the workforce. HCOs support audits impacting their regions, are responsible for change management and continuous improvement, and participate in the development of operational strategies. An HCO holds a Level III warrant with unlimited procurement authority.

Policy and Oversight Division Director/Staff – An individual responsible for managing acquisition policy; overseeing AGO operating practices to facilitate consistent and efficient operating methods, audits, acquisition system requirements, and training and communications; and conducting analysis to support strategic sourcing efforts. The POD is also responsible for the technical support and infrastructure of the AGO website to improve self-service options for customers and AGO staff.

Procurement Official – The senior individual responsible for overall acquisition authority within a bureau, including signing off on the largest procurements. The Procurement Official is an outward facing role, liaising with the DOC on acquisition policy, systems, and legal matters, and responding to audit matters with the OIG and GAO. The Procurement Official represents NOAA on the Department Acquisition Council. Also, the Procurement Official makes final budget and operational strategy decisions and is responsible for strategic partnerships. The Procurement Officer holds a Level III warrant with unlimited procurement authority.

Purchasing Agent – An individual responsible for buying supplies or services valued under \$100,000 using simplified acquisition procedures for the organization. Purchasing Agents also issue orders against established contracts, such as GSA Federal Supply Schedule contracts and blanket purchase agreements. This role does not require a warrant.

4.3.4.3 Additional Information

More information on NOAA Acquisition is available at the NOAA AGO public website: www.ago.noaa.gov. This site provides information on Acquisition and Grants at NOAA, including NOAA AGO guidance documents, templates, and policies. The NOAA Acquisition Handbook provides detailed information on NOAA's Acquisition process. The handbook is

available at www.ago.noaa.gov/ad/policy/Acq-Handbook-1-rev3.1.pdf and www.ago.noaa.gov/ad/policy/Acq-Handbook-1-rev3.1.pdf and www.ago.noaa.gov/ad/policy/Acq-Handbook-1-rev3.1.pdf and www.ago.noaa.gov/ad/policy/Acq-Handbook-2-rev3.1.pdf and www.ago.noaa.gov/ad/policy/Acq-Handbook-1-rev3.1.pdf and www.ago.noaa.gov/ad/policy/Acq-Handbook-2-rev3.1.pdf and <a href="https://www.ago.noaa.gov/ad/policy/Acq-Handb

4.3.5 GRANTS MANAGEMENT

The Grants Management Division (GMD) supports NOAA Line Office grants and cooperative agreements activities from a centralized location in Silver Spring. GMD serves as the single conduit and final decision station for all fiscal actions involving grants and cooperative agreements for NOAA.

A **grant** agreement is the preferred assistance instrument if no substantial involvement is anticipated between the Federal Government and the recipient during the performance of the assistance activities.

A **cooperative agreement** is the preferred assistance instrument if substantial involvement is anticipated between the Federal Government and the recipient during the performance of the assistance activities.

Approximately one-fourth of NOAA annual appropriations are expended through grants and cooperative agreements.

4.3.5.1 Assistance Instruments

Grants and cooperative agreements are two kinds of assistance instruments awarded by the Federal government. An assistance instrument is to be used when the relationship between the Federal Government and the recipient has as its principal purpose the transfer of money, property, services or anything of value in order to accomplish a public purpose of support or stimulation authorized by Federal statute.

Grants and cooperative agreements are the only awards made by GMD.

4.3.5.2 Kinds of Grants and Cooperative Agreements

Competitive awards – a kind of discretionary award in which NOAA announces fund availability through Grants.gov and other public venues. Eligible applicants are defined, areas of interest described, number and amounts of anticipated awards identified, and review criteria specified.

Non-competitive awards – a kind of discretionary award in which NOAA does not announce availability of funds, but a prospective applicant requests support for a particular project or range of activities which can be supported by NOAA statute which is so unusual or outstanding that funding is determined through a separate and rigorous approval process and the activity could not have been supported under a current or recent funding

All grants and cooperative agreements are either non-discretionary or discretionary.

Non-discretionary awards are those for which applicants and authorized activities are designated by statute.

Discretionary awards are those for which the applicant and authorized activities are not identified by statute and awards may be made based on the authorizing legislation, preferably and usually through a competitive award process.

announcement.

Formula awards – a kind of non-discretionary award to states and territories which must be awarded if the eligible applicant meets certain qualifying conditions and submits an otherwise acceptable proposal. A statutorily determined formula determines the eligibility for and distribution of funds.

Congressionally Mandated – a kind of non-discretionary award in which the recipient and usually the activity to be funded are identified in statute. No funds may be utilized by NOAA for award, monitoring, or participation in the activities of these awards.

Soft Earmark – a kind of discretionary award in which the recipient and activity to be funded are identified in Congressional conference or committee language. A reasonable amount of funds may be utilized by NOAA for award, monitoring, or participation in the activities of these awards.

Institutional award – a kind of discretionary award in which long term relationships are established between NOAA and large research organizations, usually universities, revolving around a specific research theme or themes. These are generally competed and are awarded for up to five years with a potential for renewal.

Chapter 5 Management Systems

NOAA organizations use a combination of management and financial systems to conduct operations. The first is a system of systems—the Commerce Business System (CBS)—for all of DOC. NOAA-specific systems include CasaNOSA, Program Information Reporting System (PIRS), and NOAA Data Warehouse (NDW) and the Management Analysis Reporting System (MARS). These systems support planning, programming, budget formulation, budget execution, and performance integration for improved financial management. NOAA's End-to-End (E2E) system is being developed to support the data and information needs of PPBES. Acquisition and Grants users process actions via the C Request and Grants On-Line systems, respectively.

5.1 Commerce Business System

CBS is DOC's core financial accounting system. It consists of a set of financial management modules required of all organizations within the Department of Commerce, and several additional financial management modules specific to the needs of the individual Bureaus. The total collection of financial management modules includes general ledger, accounts payable, accounts receivable, budget, purchase card, travel, reimbursable, NFC payroll correction, procurement, postal, and Oracle financials.

The primary purpose of CBS is to standardize financial management within DOC. The secondary purpose is to modernize the financial management systems of the various organizations and make them better, faster, and easier to use. Another secondary purpose is to allow proper audits and accountability for changing Federal government financial requirements.

5.2 E2E

The End to End Resource Management System (E2E), currently under development, will provide integrated automated support for the Planning, Programming, Budgeting, and Execution System (PPBES). The FY 2008 investment in the E2E will implement and expand upon FY 2006 and FY 2007 planning and business process analysis/re-engineering activities to connect the four PPBES phases into an integrated whole. The E2E will rationalize the current system of text, spreadsheets, and databases - minor and major - into a single system of systems. The E2E will utilize modules reflecting the four PPBES phases and include interfaces to the Department of Commerce's Commerce Business System and Consolidated Reporting System

5.3 CASANOSA

CasaNOSA is a secure system, using open-source program code, that provides a central access point to view multiple NOAA databases (over 120 databases). Each database contains a suite of ten collaborative tools supporting project development and resource management. CasaNOSA is the "home" of the NOAA Observing System Architecture (NOSA) and the Program Operating Plans (POPs) described in section 4.1.4.2. By collecting enterprise data and using customized analysis tools, users can answer NOAA corporate questions quickly and easily. For example, the Program Operating Plan (POP) database in CasaNOSA describes each program's resource needs. Major resource components of POP include: current program resources and outputs,

program schedule, support to and from the program, 100 percent requirement resources and outputs, program gap at the capability level, and alternatives and options. Having the POP data on hand is useful because other groups in NOAA can use CasaNOSA and pull in POP data for various reports and queries that use the program structure.

5.4 PROGRAM INFORMATION REPORTING SYSTEM

The Program Information Reporting System (PIRS) is the authorative source of data on the current NOAA Program. PIRS is a web-based database that contains the current NOAA Program and a historical record of changes. The system can generate predetermined and user-specified reports of program data in detail or in summary-level views. PIRS shares data, using manual manipulation, with both planning and budget formulation. The functionality of PIRS will be included in E2E in the future.

5.5 NOAA DATA WAREHOUSE

NOAA's budget is coordinated by the Budget Office within the Office of the Chief Financial Officer. Budget formulation information is maintained within the NOAA Data Warehouse (NDW) in a budget formulation database. Budget execution information is drawn directly from obligation and expenditure data available in CBS, and is updated daily and housed in the NDW. The Monument software application is used during budget formulation and publishing.

5.6 Management Analysis Reporting System

MARS—a NOAA-wide management tool for commitment tracking, labor projecting, and financial management reporting—became available beginning in October 2007. Composed of the Financial Reporting System (FRS) used in NMFS, NOS, and OMAO and Business Objects, MARS will be used by all LOs/SOs and FMCs. MARS will provide a single line of sight for NOAA's financial position at the budgetary and programmatic levels, and will allow all LOs/SOs, FMCs, and program personnel to track transaction-based documents for requisitions/commitments; forecast labor and conduct personnel tracking; build spend plans; and analyze financial management information.

https://inside.noaa.gov/noaa/Budget____Planning/MARS_implementation

5.7 Grants On-Line

NOAA Grants Online is the premier Federal solution for full life-cycle grants management processing. Visit https://grantsonline.rdc.noaa.gov/flows/home for more information.

5.8 C Request

C Request was deployed by the DOC on October 16, 2006. C. Request is an electronic method for submitting procurement actions to the NOAA Acquisition Office for action. C Request actions follow the same approval process as the CD-435 Procurement Request.

Chapter 6 Conclusion and Summary

The goal of NOAA's Business Operations Manual is to provide insight into the way NOAA defines its vision, mission, goals, and work; its structure; and how it obtains, applies, and monitors resources to do the work required. Through the BOM NOAA employees become informed stakeholders integrated into NOAA's processes and invested in NOAA's success.

All NOAA personnel are affected by the topics covered in the BOM. The primary users—Line Offices, Staff Offices, and Goal Teams—will generally employ the information contained in this manual on a day-to-day basis. The BOM is broadly applicable, designed to be used as a desk reference, either in hardcopy, or electronic format, for general information, and as a starting point for more information for specific inquiries. Research should begin with the BOM when exploring business issues, and to NOAA websites, and other responsible resources, to gain specific information or contacts to investigate case specific information. The BOM is available in keyword searchable electronic format so that topics can be found quickly, and Appendix F contains references to NOAA websites, NOAA policy documents, and other pertinent information.

NOAA's organizational construct consists of Corporate Offices (Staff Offices), Operating Offices (Line Offices) and Goal Leads. Corporate offices are the top level representation of NOAA. The Administrator, the Chief Financial Officer, and Chief Information Officer are representative of the level of management in the corporate offices. Corporate offices have authority and responsibility for the NOAA Program, and ensuring the organization's regulatory and fiscal management and compliance. These offices execute programs in support of NOAA's mission.

Goal Leads represent NOAA's functional competencies: Ecosystem, Climate, Weather and Water, Commerce and Transportation, and NOAA Mission Support. Goal Teams translate the high-level, strategic goals of NOAA into actionable programs. Operating Offices are the Line Offices that resource and execute the NOAA's mission related programs.

The processes and systems used by NOAA to develop, fund, staff, and deliver its products and services are found in the Business Operations Chapter. This chapter is divided into two major sections, Support Services and Management of Resources. Support Services are dedicated to those business processes that form the core of critical policy, programmatic, and managerial support to NOAA operations. Management of Resources such as Facilities Management, Acquisition and Grants, and Information Technology Management provide the infrastructure support services that enable NOAA to work effectively.

This version of the BOM provides a great deal of information regarding PPBES as a section of Business Operations. New sub-sections to Support Services and Management of Resources have been added in this version to provide a more comprehensive view of NOAA's operations.

The BOM is a foundation for understanding business within NOAA, but is not all inclusive of NOAA's policies, processes, and procedures. The BOM will continue to grow and evolve, and additional inputs for integration will be sought for the next revision. All inputs are appreciated, and should be submitted to NOAA's Program and Planning Integration Office (www.ppi.noaa.gov).

Appendix A – Acronyms

- AA Assistant Administrator
- AAP Advanced Acquisition Plan
- AGM Annual Guidance Memorandum
- AGO Acquisition and Grants Office
- AOP Annual Operating Plan
- APP Annual Performance Plan
- **ASC** Administrative Service Centers
- **BDM** Budget Decision Memorandum
- **BFA** Budget Formulation Analysis
- **BIB** Budget in Brief
- **BIS** Bureau of Industry and Security
- **BOC** Bureau of the Census
- **BoEA** Bureau of Economic Analysis
- **BOM** Business Operations Manual
- **BOP** Budget Operating Plans
- **CAMS** Commerce Administrative Management System (now CBS, see below)
- CAO Chief Administration Officer
- **CAR** Commerce Acquisition Regulation
- **CBS** Commerce Business System
- **CE** Categorical Exclusion
- CEQ Council on Environmental Quality
- CFO Chief Financial Officer
- **CI** Cooperative Institutes
- **CIO** Chief Information Officer
- CITRB Commerce's IT Review Board

- **COR** Contracting Officer's Representative
- **CPM** Corporate Performance Measure
- **CR** Continuing Resolution
- **DAA** (Line Office) Deputy Assistant Administrator
- **DAS-** Deputy Assistant Secretary
- **DCO** Decision Coordination Office
- **DHS** Department of Homeland Security
- **DOA** Department of Agriculture
- **DOC** Department of Commerce
- **DOD** Department of Defense
- **DOI** Department of Interior
- **DOE** Department of Energy
- **DOO** Department Organization Order
- **DUS** Deputy Undersecretary for Oceans and Atmosphere
- **EA** Environmental Assessment
- **EDA** Economic Development Administration
- **EDP Executive Decision Process**
- **EO** Executive Order
- **E2E** End-TO-End
- FOC Full Operational Capability
- **EIS** Environmental Impact Statement
- **EPA** Environmental Protection Agency
- **ESA** Economic and Statistics Administration
- **EUMETSAT** European Organization for Exploration of Meteorological Satellites
- FCI Facility Condition Index
- FIMB Facilities Investment Management Board
- FMC Financial Management Centers
- FOC Full Operational Capability

FONSI - Finding of NO Significant Impact

FPCD- Financial Policy compliance Division

FTE - Full-time Equivalent

FY - Fiscal Year

GAO - Government Accounting Office

GC - General Counsel

GEO – Group on Earth Observations

GTL - Goal Team Lead

GPRA - Government Performance and Results Act of 1993

GOES – Geostationary Observational Environmental Satellites

GSA – Government Services Administration

HCC – Human Capital Council

HCO – Head of Contract Office

HHS - Health and Human Services

HPCC – High Performance Computing and Communications

IA - International Affairs

IAC - International Affairs Council

ICCAT - International Convention for the Conservation of Atlantic Tuna

IOC - Initial Operating Capability or Intergovernmental Oceanographic Commission

IPL - Integrated Priority List

IPO – Integrated Program Office

IT – Information Technology

ITA - International Trade Administration

IWC – International Whaling Commission

KDP - Key Decision Point

LA - Legislative Affairs

LO - Line Office

MOA – Memorandum of Agreement

MOU - Memorandum of Understanding

NAO - NOAA Administrative Order

NASA – National Aeronautics and Space Administration

NDW - NOAA Data Warehouse

NEC - NOAA Executive Council

NEP - NOAA Executive Panel

NEPA - National Environmental Policy Act

NESDIS – National Environmental Satellite, Data, and Information Service (NOAA Satellite Information Service)

NIST - National Institute of Standards and Technology

NITRB - NOAA IT Review Board

NMFS – National Marine Fisheries Service (NOAA Fisheries Service)

NOAA - National Oceanic and Atmospheric Administration

NOC - NOAA Ocean Council

NOS – National Ocean Service (NOAA Oceans and Coasts Service)

NOSC - NOAA Observing Systems Council

NWS - National Weather Service (NOAA National Weather Service)

NEC - NOAA Executive Council

NEP - NOAA Executive Panel

NPOESS – National Polar-orbiting Operational Environmental Satellite System

MBDA – Minority Business Development Agency

NMAO - NOAA Marine and Aviation Operations

NSF - National Science Foundation

NTIA - National Telecommunications and Information Service

NTIS - National Technical Information Service

OAR - NOAA's Office of Oceanic and Atmospheric Research (NOAA Research)

OIG - Office of Inspector General

OMB – Office of Management and Budget

ORF - Operations, Research, and Facilities

PA - Public Affairs

PAC – Procurement, Acquisitions, and Construction

PAR – Performance and Accountability Report

PA&E - Program Analysis and Evaluation

PART - Program Assessment Rating Tool

PATT – Priority Area Task Teams

PCO – Program Coordination Office

PDM - Program Decision Memorandum

PMC - Program Management Council

PPA - Program, Project or Activity

PPBES - Planning, Programming, Budgeting and Execution System

POES – Polar Operational Environmental Satellites

POP – Program Operating Plan

PPI - Program Planning and Integration (NOAA Program Planning and Integration)

PTO - Patent and Trademark Office

RM – Requirements Management

SAB - Science Advisory Board

SITP - Strategic IT Plan

SO - Staff Office

SON - Statement of Need

SSP – Satellite Services Plan

SPA - Strategic Portfolio Analysis

WMO – World Meteorology Organization

Appendix B - Glossary

Accountability - a responsibility to explain actions undertaken. Requires managers to (1) clarify what is expected, (2) examine program activities and performance measures and compare its performance with what is expected, (3) act on findings to improve program activities and performance measures, and (4) communicate findings in accordance with agency and government regulations.

Activity – an action within a capability that provides further separation of NOAA's program components into functions that deliver products and services to accomplish an objective.

Annual Guidance Memorandum (AGM) - strategic guidance from the Under Secretary of Commerce for Oceans and Atmosphere, or NOAA Administrator, to goal team leads for use in the development of Goal Strategic Portfolio Analysis during the Planning phase of PPBES.

Annual Operating Plan (AOP) - a plan required by the Deputy Under Secretary of Oceans and Atmosphere and produced by the NOAA Line and Staff Offices outlining a schedule of events, responsibilities and milestones for the current fiscal year. The AOP outlines planned actions to be taken throughout the year to accomplish the approved and appropriated NOAA Program (Execution phase of PPBES). The status of the AOP schedule is reviewed quarterly by the DUS.

Annual Performance Plan (APP) - a plan required by the Office of Management and Budget (OMB) providing the direct linkage between long-term strategic goals outlined in agencies' strategic plans and what managers and employees are committed to accomplish in a given fiscal year given the associated budget. The APP is presented in the first section of agencies' budget submissions to DOC, OMB and Congress.

Application - the use of research results in furthering NOAA's mission.

Appropriation - a provision of law providing budget authority that enables an agency to incur obligations and to make payments out of the Treasury for specified purposes. Appropriations are the most common means of providing budget authority. Annual appropriations are provided in appropriations acts; most permanent appropriations are enacted in substantive law.

Budgeting - the process for determining the resources required by NOAA to meet its program commitments; justifying these requirements to various review levels; determining the impacts of revised resource levels; and executing the program at the approved funding level.

Capability - the ability to do something. (e.g., restore coastal habitat). A capability is a combination of activities, processes, and skills/competencies.

Capability Gap – the difference between the capability that is required to satisfy a mission requirement and what is currently available to satisfy that requirement.

Capacity - the amount of an asset or resources used (input capacity) or the quantity of something produced (output capacity). Input capacities may include funding, personnel (e.g., NOAA Corps, FTEs, and contractors), laboratories and associated personnel, facilities, vessel operating days, flight hours, satellite usage, etc. Output capacities may include grants awarded, data gathered, products produced, customers served, research projects, and education/outreach efforts.

Capital Asset - defined by OMB Circular A-11 as "land, structures, equipment, intellectual property (e.g. software), and information technology (including IT service contracts) that are used by the Federal Government and have a useful life of two or more years".

Charter - a public document that details how requirement drivers relate to the mission requirements. The charter provides an overview of the program, lists program outcomes, provides links to the NOAA Strategic Plan, establishes program roles and responsibilities, and lists end users and beneficiaries. Every NOAA program is required to have an approved Charter.

Chief Financial Officer (CFO) - serves as the principal financial manager for NOAA. The CFO's Office has the responsibility under the CFO Act to provide the leadership necessary for NOAA to obtain a yearly-unqualified opinion in the audit of its consolidated financial statements. The areas under the direction of the CFO are the Budget and Finance Offices.

Commerce Business System (CBS) - (formerly Commerce Administrative Management System – CAMS) - a Department of Commerce-wide effort designed to modernize and integrate financial and administrative management systems and to streamline related business processes. The goal of CBS is to employ modern technology in providing managers with standardized, accurate, and timely information to manage their resources while at the same time reducing administrative costs.

Committee - an established group that reports to a NOAA Council.

Constituent – any entity to which NOAA provides a product or service or has is impacted by NOAA's mission. This includes citizens and businesses as well as other government agencies.

Continuing Resolution – legislation in the form of a joint resolution enacted by Congress, when the new fiscal year is about to begin or has begun, to provide budget authority for Federal agencies and programs to continue in operation until the regular appropriations acts are enacted.

Council - an established group that reports to the NOAA Executive Council (NEC) or NOAA Executive Panel (NEP). All Councils report to the NEP and NEC except for the International Affairs Council and the Research Council, which report directly to the NEC.

Cross-Cutting Priority - guided by NOAA councils, describes the thematic underpinnings that facilitate delivery of services, enables effective operations, and promotes creativity throughout NOAA identified in the Strategic Plan. The priorities establish the programmatic and managerial foundation for effective operations across multiple Line Offices.

Customer - A stakeholder that uses NOAA's products and services.

Cuff System – Any reporting and analysis system maintained by the line office that is outside of NOAA-wide systems (e.g., Monument).

Defined Criteria - technical performance and cost-effectiveness parameters to be met prior to the operational implementation or information service delivery

Department of Commerce (DOC) - the Department of Commerce (the parent department of NOAA) and its component bureaus create the conditions for economic growth and opportunity by promoting innovation, entrepreneurship, competitiveness and stewardship. The DOC's mission is linked directly to encouraging the economic growth that benefits all American industries, workers 143

and consumers; enhancing technological leadership and environmental stewardship, and advocating market growth strategies. The responsibilities of the DOC are to foster U.S. business and industry; stimulate international trade; measure and analyze social development and economic activity; advance our nation's scientific and technological capabilities; and understand, predict, and protect the natural environment.

Derivative Strategic Plans – strategic plans written by NOAA organizations (Line/Staff Offices, goals, programs, councils) that serve as a bridge between the NOAA Strategic Plan and the operational or functional components of NOAA.

Discoverer – a web based application developed by Oracle that allows one to access financial information stored in the NOAA Data Warehouse, and to access standard reports and develop queries of information from the Commerce Business System (CBS). The components of CBS include general ledger, budget execution and funds control, accounts payable, accounts receivable, reimbursables, labor, travel and bank card.

Efficiency – the ratio of the effective or useful output to the total input (i.e., producing effectively with a minimum of waste, expense, or unnecessary effort).

Effectiveness – an assessment of the qualitative level of achievement of program goals and the intended results.

End to End Resource Management System (E2E) Project – E2E is a project to provide the next generation, NOAA-wide financial information system that will, provide decision support for NOAA resource management, improve NOAA's effectiveness in resource management, produce budget data (Including budget justifications), and eliminate duplicative processes. The system will be used across all phases of PPBES. Use of an integrated information and decision support system will permit staff to focus on analysis and quality control rather than data re-entry.

Evaluation - is a systematic assessment of how well a program is working, which typically examines achievement of program objectives. There are four main types of evaluation, including outcome evaluation (what the program accomplished), impact evaluation (net effect of program), process evaluation (extent the program is operating as intended), and cost-benefit/cost-effectiveness evaluation (GAO, 2005a).

Execution - consists of two elements: Execution of the Annual Operating Plan (where the work is performed and performance is measured), and Budget Execution (where programs are discharged within approved budget levels through the use of effective fund control and financial management).

Executive Decision Process (EDP) – uses a tiered structure wherein significant NOAA issues are identified, discussed, decided or framed for decision at the next higher level. The structure consists of the NOAA Executive Council, NOAA Executive Panel, Councils, and Committees.

Executive Order (EO) - presidential direction to the executive branch of government (e.g. Executive Order 12906, "Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure").

Exhibit 300 – The Capital Asset Plan and Business Case Summary is designed to coordinate OMB's collection of agency information for its reports to the Congress required by the Federal

Acquisition Streamlining Act of 1994 (FASA Title V) and the Clinger-Cohen Act of 1996; to ensure the business case for investments are made and tied to the mission statements, long-term goals and objectives, and annual performance plans developed pursuant to the GPRA. For IT, exhibit 300s are designed to be used as one-stop documents for many of IT management issues such as business cases for investments, IT security reporting, Clinger Cohen Act implementation, E-Gov Act implementation, Government Paperwork Elimination Act implementation, agency's modernization efforts, and overall project (investment) management.

Fiscal Year (FY) - a 12-month period used for calculating annual ("yearly") financial reports in an organization. The US Government's FY begins on October 1 of the previous calendar year and ends on September 30 of the year with which it is numbered.

Full Operational Capability (FOC) - the full attainment of the specific characteristics of the product or service at Key Decision Point-4 (KDP-4). FOC delivers the ability to use effectively a NOAA service, product and/or system when operated by a trained, equipped, and supported workforce.

Goal - an elaboration of the mission statement, developing with greater specificity as to how an agency will focus its mission. The NOAA Strategic Plan contains five goals. All of NOAA's 46 programs reside within one of the five goals.

Goal Strategic Portfolio Analysis – a part of the Planning phase that provides NOAA leadership with a review of Goal issues over the planning period.

Goal Lead - an individual formally assigned the responsibility for coordinating the Planning, Programming, Budgeting and Execution System (PPBES) process within a NOAA Goal. The Goal Lead is also responsible for the performance of the individual programs that fall within that NOAA goal.

Government Performance and Results Act (GPRA) of 1993 - a mandate (P.L. 103-62) that requires agencies to submit initial strategic plans to DOC and then to OMB, with updates at least every three years, and annual performance plans covering performance measures for each major program activity. On the basis of these plans, an agency's annual performance plan is included in the President's budget for that agency. GPRA is unique in its requirement that agency "results" be integrated into the budgetary decision-making process. The Annual Performance Plan (APP) do

Information Services - production and delivery of interpreted and/or synthesized data, decision tools, and scientific knowledge and understanding to decision- and policy-makers, the scientific community, and the public.

Initial Operating Capability – the point at which a developmental system has met at least the minimum threshold for performance has entered into service in a limited number or capacity.

Input - the financial and human resources, intellectual processes and infrastructure the organization uses to deliver a capability.

Interagency or International Agreement - a formal agreement between one or more agencies/countries (e.g., the Earth Observations Summit agreement).

Key Decision Point (KDP) – a significant milestone in project implementation documenting an agency investment decision. The KDPs are as follows (for systems acquisitions, Department Administrative Orders (DAOs) may provide more specific requirements or definitions):

- Key Decision Point-1 (KDP-1) needs identification and definition: identification and definition of shortfalls, their relative priority within NOAA, and the general magnitude of life cycle costs that may be needed to address them.
- Key Decision Point-2 (KDP-2) solution alternatives identification: selection of one or more alternatives to be advanced for further analysis (including research and pilot testing).
- Key Decision Point-3 (KDP-3) solution selection: selection of an approach, including project scope, review procedures, and commitment as appropriate to full-scale research and development.
- Key Decision Point-4 (KDP-4) acquisition/implementation approval: commitment to full acquisition and/or operational implementation with explicit approval of baseline objectives and project scope to include life cycle cost, schedule, and performance goals.

Legislation - includes a Bill, Act or Amendment enacted law by the Congress of the United States of America (e.g., Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 [S.3014.ES]; Consolidated Appropriations Act of 2005 [H.R.4818]). Legislation is not conference language, proposed bills/acts, or other discussions of Congress.

Life Cycle Cost - defined by OMB Circular A-11 as "The overall estimated cost, both government and contractor, for a particular project alternative over the time period corresponding to the life of the project, including direct and indirect initial costs plus any periodic or continuing costs of operation and maintenance." Life Cycle Costs includes the total cost to the government over the full project life, including (as applicable) the cost of research and development; investment in mission and support equipment (hardware and software), initial inventories, training, data, facilities, operations, maintenance, support, and retirement or disposal.

Major Project – as defined in NAO 216-108, any project with life cycle costs greater than the NOAA-established threshold (currently \$250 million FY 2005 constant dollars), unless otherwise directed by DOC or higher authority. The life cycle cost determination should be computed over the service life for physical assets and over 10 years for other projects. The Deputy Under Secretary may also designate any project as a major project based on any of the criteria found in OMB Circular A-11, regardless of its life cycle costs. These criteria include:

- o importance to the agency's mission;
- high development, operating, or maintenance costs;
- o high risk;
- high return; and/or
- significant role in the administration of the agency's programs, finances, property, or other resources.

Master Calendar – a calendar that integrates the activity timelines of the four phases of the NOAA Planning, Programming, Budgeting, and Execution System (PPBES) through the multiple fiscal years.

Matrix Management – a program management construct that allows NOAA to organize resources across organizational components to reach the stated strategic goals by leveraging cross-office strengths and standardizing processes. The construct combines advantages of the functional (Line Office) structure and the product (program) structure. Successful implementation requires a cooperative approach to management across two or more NOAA functional units.

Matrix Program - a program in the NOAA program structure where the mission is supported by resources from multiple Line Offices, or when the NEC designates them as matrix. NOAA matrix programs have policies, processes, and procedures that support the structure and communications that are reinforced by leadership that encourages the structure.

Mission – a concise statement on what the agency is charged to do. The NOAA mission: To understand and predict changes in the Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs.

Mission Requirement – a validated NOAA responsibility resulting from one or more requirements drivers. Mission requirements should be understandable, outcome-oriented, concise, and actionable, and should identify the need but not prescribe specific solutions

Monument – an application in the NOAA Budget Support System which provides the ability to review and edit budget documents. The system in managed by the NOAA Budget Office Integration Division in support of the Budget Formulation Division. Monument provides a single point of entry capability for Line Offices to enter budget narrative text and exhibits into a central application. After entry, the information is available for edit and review by other personnel in the Line Office and Budget Formulation Division.

NOAA Administrative Order (NAO) - covers substantive program matters and administrative management policy, procedures, responsibilities, and requirements for such administrative matters as budget, travel, personnel, procurement, etc. The NAO also may address certain program matters of Staff Offices and Line Offices. NAOs may provide NOAA-specific guidance supplementing the administrative policies and procedures issued in the Department of Commerce Administrative Order (DAO) series. NAOs may also be issued on subjects other than those covered in the DAO series.

NOAA Program – an integrated, fiscally balanced, five year plan reflecting all of NOAA's appropriated funds; it is not intended to be viewed outside of NOAA.

Non-Major Project - any project that does not meet the definition of a major project.

Objective - an elaboration of a goal statement, developing with greater specificity the intent of the goal which may provide insight into the strategy for achieving the goal. Used below the Goal level to describe the intended results.

Office of Management and Budget (OMB) - the office that assists the President in overseeing the preparation of the president's budget and supervises its administration in Executive Branch agencies. In helping to formulate the President's spending plans, OMB evaluates the

effectiveness of agency programs, policies, and procedures, assesses competing funding demands among agencies, and sets funding priorities. OMB ensures that agency reports, rules, testimony, and proposed legislation are consistent with the President's Budget and with Administration policies. In addition, OMB oversees and coordinates the Administration's procurement, financial management, information, and regulatory policies. In each of these areas, OMB's role is to help improve administrative management, to develop better performance measures and coordinating mechanisms, and to reduce any unnecessary burdens on the public.

Official Action - a NOAA action from the Administrator or Associate Administrators. The Strategic Plan and Official Memorandums contain policy direction and are requirements drivers.

Office of Management and Budget (OMB) Circular No. A–11 - provides guidance on preparing the Budget submission for a given FY, and includes instructions on budget execution.

Operations - sustained, systematic, reliable, and robust mission activities with an institutional commitment to deliver appropriate, cost-effective products and services.

Outcome - an end result, expected and unexpected, of the customer's use or application of the organization's outputs. Outcomes may be long-term, mid-term or short-term in nature.

Output - the products or services resulting from a capability.

Partner - A non-NOAA stakeholder that assists NOAA in the conduct of its mission. NOAA collaborates with a wide range of partners. They can be divided roughly into three types:

Statutory	Other Formal	Informal
Standing statutory relationship with other Federal or state organizations; partner formally authorized to assist NOAA in achieving its mission	Formal relationship codified by MOUs, MOAs, or other formal inter-organizational agreements to collaborate in the conduct of mutual mission goals and objectives Examples include Coastal America and Cooperative	Working relationships with other organizations that assist NOAA in the conduct of its mission, not under the terms of formal interorganizational agreements Example includes Smithsonian Exhibit for the
Examples include Sea Grant Programs, CZ Managers, NERRs, and State Fisheries Managers	Institutes	NOAA 200 th Anniversary Celebration

Performance and Accountability Report- a report required by the Office of Management and Budget (OMB) and produced by the Department of Commerce (DOC) documenting achievements toward the accomplishment of the President's Management Agenda; status of the Department's annual financial audit; and performance against the Government Performance and Results Act (GPRA) goals.

Performance Management - the systematic process of monitoring the results of activities; collecting and analyzing performance information to track progress toward planning results; using performance information to inform program decision-making and resource allocation; and

communicating results achieved, or not attained, to advance organizational learning and tell the Agency's story.

Performance Measure - a structured statement that describes the means by which actual outcomes and outputs are measured against planned outcomes and outputs. Performance measures consist of four parts:

Indicator - the part of a performance measure that defines the attribute or characteristic to be measured

Unit of Measure - the part of a performance measure that describes what is to be measured.

Baseline - the part of a performance measure that establishes the initial level of measurement (value and date) against which targeted progress and success is compared. A baseline includes both a starting date and starting level/value.

Target - the part of a performance measure that establishes the desired level to be reached in a defined time period, usually stated as an improvement over the baseline.

Performance Measurement - the ongoing monitoring and reporting of program accomplishments, particularly progress towards preestablished goals by NOAA management.

Planning - the formal process to determine both internal and external requirements including program performance.

Portfolio Management - the processes, practices and specific activities to perform continuous and consistent evaluation, prioritization, budgeting, and finally selection of investments that provide the greatest value and contribution to the strategic interest of the organization. Through portfolio management, NOAA can explicitly assess the tradeoffs among competing investment opportunities in terms of their benefits, costs, and risks.

President's Management Agenda - an aggressive strategy for improving the management of the Federal government. It focuses on five areas of management weakness across the government where improvements and the most progress can be made. The five areas are:

Strategic management of human capital

Competitive sourcing

Improved financial performance

Expanded electronic performance

Budget and performance integration.

Program Assessment or Evaluation - individual, systematic studies conducted periodically or on an ad hoc basis to assess how well a program is working. The assessments are often conducted by experts external to the program (see definition of the Program Assessment Rating Tool below), either inside or outside the agency, as well as by program managers. A program evaluation typically examines achievement of program objectives in the context of other aspects of program performance or in the context in which it occurs. Four main types can be identified, all 149

of which use measures of program performance, along with other information, to learn the benefits of a program or how to improve it. Assessments are one type of study done by GAO under the broad category of performance audits.

Program Assessment Rating Tool (PART) - a questionnaire administered by the Office of Management and Budget to determine the strengths and weaknesses of Federal programs with particular focus on individual program results. Seven different PART worksheets are available reflecting the fact that Federal programs deliver goods and services using different mechanisms. The seven PART types are Direct Federal, Competitive Grant, Block/Formula Grant, Research and Development, Capital Assets and Acquisition, Credit, and Regulatory. Each type of PART includes the 25 basic questions that comprise the Direct Federal PART, plus selected questions tailored to that program type to help further flesh out the PART analysis.

Program Component - the further separation of NOAA's programs into sub-elements.

Program Decision Memorandum (PDM) - an annual document produced at the end of the Programming phase of the PPBES that outlines the program funding and priority decisions of the NOAA Administrator. The PDM is the basis for the development of the NOAA budget.

Program Operating Plan (POP) - the document produced annually in the Planning phase by the program manager. The POP identifies the complete requirement to achieve NOAA's strategic vision and mission, priorities of the program and measures of performance.

Program Plan – a document produced annually by the goal team during the Programming phase. The program plan presents the goal or subgoal's recommendation for achieving, in the most optimal manner, NOAA's strategic goals and future directions as detailed in the Strategic Plan and the Annual Guidance Memorandum. Program plans are an essential input used in the development of the NOAA Program.

Project - any undertaking of a temporary nature (e.g., research, assessment, prediction, acquisition, or stewardship efforts) designed to create a service, product, system and/or system upgrade in support of a validated NOAA Mission Requirement. A NOAA project is intended to address a shortfall within defined budget and schedule constraints and terminates when the service, product or system achieves full operational capability (FOC), when the capability gap is resolved or, in coordination with other programs, when directed by the project manager or higher authority.

Project Management - the application of knowledge, skills, and techniques to project activities in order to meet or exceed stakeholder/customer needs and expectations from a project. All projects have a designated project manager. The project manager is responsible for translating mission requirements into a project to ensure a satisfactory solution is delivered. The project manager establishes and maintains a process to manage change throughout the project's life cycle, and is responsible for preparing documentation to support the continuous and systematic review of progress as it relates to Key Decision Points (KDPs) and meeting mission requirements.

Project Manager – an individual formally designated to manage a NOAA project.

Regulations - published in the Federal Register by the executive department and agencies of the Federal Government and constitute a set of direction to all agencies of the Federal government (e.g., 50 CFR Part 600, Magnuson-Stevens Act Provisions; National Standard Guidelines).

Requirements Driver - a NOAA responsibility that is specified in legislation, regulation, Executive Order, policy decision, interagency or international agreement, or other official action that establishes a NOAA responsibility.

Requirements Management - the framework that NOAA utilizes to meet the mission goals and outcomes of program performance measures and deliverables.

Result – The expected or unexpected outcome of NOAA's products and services.

Science Advisory Board (SAB) - the only Federal Advisory Committee with responsibility to advise the Under Secretary of Commerce for Oceans and Atmosphere on long- and short-range strategies for research, education and the application of science to resource management and environmental assessment and prediction.

Senior Management Team - a policy-level group consisting of at least one senior person from each Line Office involved in a Matrix Program that resolves potential conflicts. The Senior Management Team provides vision for the programs, capitalize on program strengths and diminish weaknesses. The Team also ensures that balance is maintained within the whole of NOAA and that NOAA remains aligned with its Strategic Plan.

Shortfall – the difference between current capabilities and the additional capability needed to meet a mission requirement.

Stakeholder - An individual or organization affected by NOAA's ability to achieve its mission.

Strategic Goal - a statement of aim or purpose that agencies include in a strategic plan.

Strategic Management - a dynamic and ongoing process for corporate decision-making. Strategic management integrates planning, programming, budgeting and execution and uses a shared system of principals, processes and support structures.

Strategic Plan - a planning document required by Office of Management and Budget that identifies how the mission will be accomplished through a vision statement, goals, strategies, and high-level outcomes for the agency. The strategic plan is reviewed by NOAA annually and covers a period of not less than five years forward from the fiscal year in which it is generated.

Strategic Planning - the process by which the future direction of NOAA is embodied in its goals, objectives, strategies and performance measures.

Strategy - a specific course of action chosen to achieve an outcome.

Sub-Goal - an elaboration of the goal, developing with greater specificity as to how an agency will focus its mission.

Test Environment - collection of hardware, software, staff, funding, and/or appropriate procedures to simulate an operational setting in order to facilitate the demonstration and evaluation of research results.

Thematic Working Group – group established on an as-needed basis to provide expertise in planning, programming, and issue resolution. These working groups help to ensure the whole

picture is understood and the correct data is collected in order to assist the appropriate Senior Management Team to make an educated and well-informed decision.

Transition Board - a group of senior level NOAA managers representing each Line Office and the NOAA Marine and Aviation Operations charged with developing procedures to oversee transition projects and associated test environments.

Transition Plan - a document identifying the comprehensive activities necessary to transfer a research result to operations. The Transition Plan identifies stakeholders, defines criteria for when a project will be transferred, and provides funding profiles for operational implementation, information service delivery, and/or follow on research.

Transition Project - the collective set of activities necessary to transfer a research result, or collection of research results, to operational status or to an information service.

Transition Team - a group of individuals assigned the responsibility to execute a transition project.

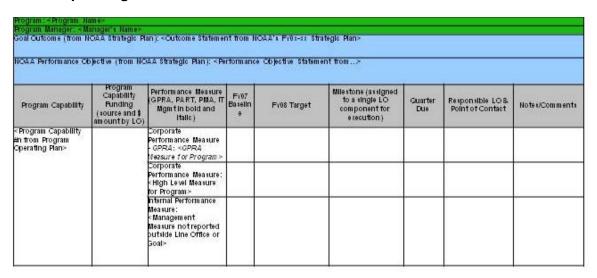
Vision Statement - a guiding statement providing the strategic direction for the agency given an established mission. The NOAA Vision: To move NOAA into the 21st Century scientifically and operationally, in the same interrelated manner as the environment that we observe and forecast, while recognizing the link between the global economy and our planet's environment.

Appendix C - NOAA Business Model - Historical Overview

The NOAA business model was conceived in 2004 by the NOAA Administrator to describe how NOAA functions internally and with outside entities to accomplish the Agency's vision and mission. This initial functional model provided an organization-wide understanding of how NOAA operates, with its dependencies and interrelationships allows NOAA to operate more effectively. Over the years this model evolved into the NOAA Functional Model described in Chapter 2 of this edition of the BOM.

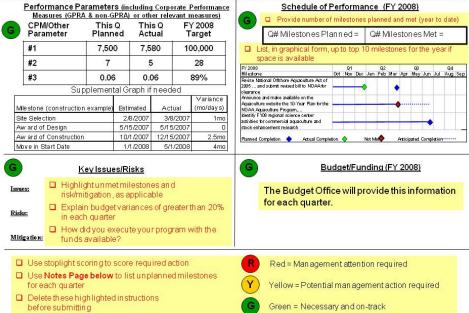


Annual Operating Plan



CPM/Other Parameter This Q Planned This Q Actual #1 7,500 7,580 #2 5

Line Office/Staff Office/Program Quad Chart as of (X) Quarter 2008



Both templates may be found at https://www.ppbs.noaa.gov/execution.html

Appendix E – Change Summary

BOM Version 4 practices.

Expanded to be more inclusive of NOAA business

Chapter	Change
1	Name change from "Operational Support Services" to "Support Services; Name change from "Program Support Services" to "Management of Resources"; New BOM graphic; Table of Contents expanded for new section.
3	Updated NOAA Organizational Chart; Revised NOAA Councils; Reorganized Program Manager responsibilities to expanded Program Management subsection in Chapter 4; Advisory Groups section added; Expanded Regional Team section; Updated NOAA Executive Decision Process
4	New Strategic Management Framework sub-section added that describes NOAA's strategic documents and guidance for producing NOAA Derivative Strategic Plans; Planning phase sub-section updated to include information on Strategic Portfolio Analysis; Expanded Support Services Section to include additional consolidated Program Management sub-section, new Project Management sub-section to include selection criteria for Major Projects, OMB Exhibit 300 guidance and OMB training requirements for Major Project Managers; New Communications Office sub-section; New Research in NOAA sub-section to include the Transition of Research to Applications sub-section; New Education sub-section; New International Affairs sub-section; Retitled section – Management of Resources and expanded Enterprise Architecture sub-section; New Facilities Management sub-section; New Satellite Management sub-section; New Acquisition sub-section; New Grants Management sub-section
5	Chapter retitled from "Helpful Tools and References" to "Management Systems"; Logic Model section removed; E2E section added; Grants On-line section added; C Request section added
Appendix A	Acronyms expanded
Appendix B	Updated definitions
Appendix D	Execution Templates updated; Transition Template removed
Appendix F	Websites updated

Appendix F - References and Resources

This section serves as a repository of sources for further information. Since the internet is a dynamic resource, this list is by no means exhaustive, so when searching for information, it may be useful to search beyond the sites listed here. Below is a listing of useful resources.

NOAA Line Office Websites – www.noaa.gov

Office of Ocean and Atmospheric Research (OAR) www.oarhq.noaa.gov

National Ocean Service (NOS) www.nos.noaa.gov

National Weather Service (NWS) www.weather.gov

National Marine Fisheries Service (NMFS) www.nmfs.noaa.gov

National Environmental Satellite, Data, and Information Service (NESDIS) www.nesdis.noaa.gov

Office of Program Planning and Integration (PPI) www.ppi.noaa.gov

- The National Environmental Policy Act (NEPA) www.nepa.noaa.gov
- The National Environmental Policy Act (NEPA) Handbook www.nepa.noaa.gov/NEPA HANDBOOK.pdf

Councils www.dco.noaa.gov

NOAA Staff Office Websites – www.noaa.gov

Corporate Finance and Administrative Services www.corporateservices.noaa.gov

Office of Program Analysis and Evaluation (PA&E) www.ppbs.noaa.gov

Acquisition and Grants Office (AGO) www.ago.noaa.gov

Workforce Management Office (WFM) www.wfm.noaa.gov

Office of Education (OEd) www.oesd.noaa.gov

Office of General Counsel (OGC) www.gc.noaa.gov

Office of International Affairs (OIA) www.international.noaa.gov

Office of Legislative Affairs www.legislative.noaa.gov

Office of the Federal Coordinator for Meteorology (OFCM) www.ofcm.gov

Office of Marine and Aviation Operations (OMAO) www.omao.noaa.gov

Decision Coordination Office (DCO) www.dco.noaa.gov

The Program Coordination Office (PCO) www.pco.noaa.gov

PPBES and Program Management Websites

PPBES Web Site www.ppbs.noaa.gov/

Goals, Programs, and Program Charters www.ppi.noaa.gov/prog_charters.htm

Matrix Program Managers www.ppi.noaa.gov/matrix.htm

Regional Collaboration www.ppi.noaa.gov

Policies, detailed procedures, and a list of members/advisors of the NEP and NEC www.DCO.noaa.gov

The POP User Guide for CasaNOSA <u>www.ppbs.noaa.gov/FY11/FY11-15 POP User Manual for CasaNOSA.pdf</u>

NOAA Budget Office

https://w3.inside.noaa.gov/noaa/Budget___Planning/BudgetOutreach_Comm

Management Analysis Reporting System

(MARS) inside.noaa.gov/noaa/Budget___Planning/MARS_implementation

General NOAA-Sponsored Websites

Federal Acquisition Institute... http://www.fai.gov

NOAA Business Operations Manual www.ppbs.noaa.gov

Organizational Chart www.pco.noaa.gov/org/NOAA Organization.htm

Government-Sponsored Websites

OMB PART Site www.whitehouse.gov/omb/part/

OMB PART Guidance for FY 2006

Budget <u>www.whitehouse.gov/omb/part/fy2007/2007_guidance_final.pdf</u>

OMB PART www.whitehouse.gov/part

PART FAQs www.whitehouse.gov/omb/part/2004_faq.html

Summary of All PART Scores www.whitehouse.gov/omb/budget/fy2006/part.html

Resources for the President's Team www.results.gov/

Historic PART Results Search Engine www.expectmore.gov/

Budget and Performance Integration <u>www.whitehouse.gov/results/agenda/budgetperformance10-03.html</u>

Example Performance Measures www.whitehouse.gov/omb/part

GAO Report www.gao.gov/highlights/d04439thigh.pdf

FY07 Budget Formulation FEA Consolidated Reference Model Document www.whitehouse.gov/omb/egov/documents/CRM.PDF

Non-Government Websites

W K Kellogg Foundation - Logic Model www.wkkf.org

Project Management Institute Site www.pmi.org

The Performance Institute... www.performanceweb.org

The Evaluators Institute...www.evaluatorsinstitute.com

American Evaluation Association... www.eval.org

Federal Evaluators....www.fedeval.net

National Fish and Wildlife Foundation...www.nfwn.org

Washington Research Evaluation Network......www.wren-network.net

American Association for the Advancement of Science....www.aaas.org

General Reference Websites

Library of Congress Database for Legislative Citations thomas.loc.gov/



NOAA World is an internal newsletter and corresponding web site designed with NOAA employees in mind. The aim is to bring the people, places and things that make NOAA an incredible place to work together. Included are regular features about NOAA's work in the regions, about the great science being done everyday throughout the agency and about what is going on corporately within NOAA.

Once a month, the **NOAA World Newsletter** will be published and will be available for download. You are encouraged to print copies and put them around your office space wherever people tend to gather. On the web site, content will be updated more frequently so check back often for changes.

As the site grows, NOAA World should serve as a resource for everyone. The site will eventually include photos, videos and other media that everyone can use. Suggestions are always welcome at noaaworld@noaa.gov



National Oceanic and Atmospheric Administration
Office of Program Planning and Integration
Silver Spring, Maryland
www.ppi.noaa.gov



